TC-FX25/FX25B

- TC-FX25 (SILVER TYPE)
  - US Model
  - Canadian Model
  - AEP Model
  - UK Model
  - E Model
- TC-FX25B (BLACK TYPE)
  - AEP Model
  - UK Model

PHOTO: SILVER TYPE

M2

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STEREO CASSETTE DECK

SPECIFICATIONS

Recording system 4-track 2-channel stereo

Fast-forward and rewind time
Approx. 100 sec. (with C-60 cassette)

Bias frequency 105 kHz

Signal-to-noise ratio (NAB, at peak level)

Cassette \ Dolby NR switch	OFF	ON
TYPE IV (Sony METALLIC)	58 dB	65 dB
TYPE III (Sony FeCr)	59 dB	66 dB
TYPE II (Sony UCX)	56 dB	63 dB
TYPE I (Sony BHF)	54 dB	61 dB

Total harmonic distortion
1.0% (with Sony METALLIC and FeCr cassettes)

Frequency response DOLBY NR OFF
- With TYPE IV cassette (Sony METALLIC)
  20 - 17,000 Hz
  30 - 15,000 Hz (±3 dB)
  30 - 13,000 Hz (±3 dB, 0 VU recording)
  30 - 15,000 Hz (DIN)
- With TYPE III cassette (Sony FeCr)
  20 - 17,000 Hz
  30 - 15,000 Hz (±3 dB)
  30 - 15,000 Hz (DIN)
- With TYPE II cassette (Sony UCX)
  20 - 17,000 Hz
  30 - 14,000 Hz (±3 dB)
  30 - 15,000 Hz (DIN)
- With TYPE I cassette (Sony BHF)
  20 - 16,000 Hz
  30 - 13,000 Hz (DIN)

— Continued on page 2 —

MICROFILM

SERVICE MANUAL

Wow and flutter	0.05% WRMS (NAB) ±0.14 % (DIN)
Inputs	Microphone inputs (phone jacks) Sensitivity 0.25 mV (−70 dB) For a low-impedance microphone Line inputs (phono jacks) Sensitivity 77.5 mV (−20 dB) Input impedance 50 k ohms
Outputs	Line outputs (phono jacks) Output level 0.44 V (−5 dB) at load impedance 50 k ohms Load impedance over 10 k ohms Headphone output Output level −28 dB at a load impedance of 8 ohms

General

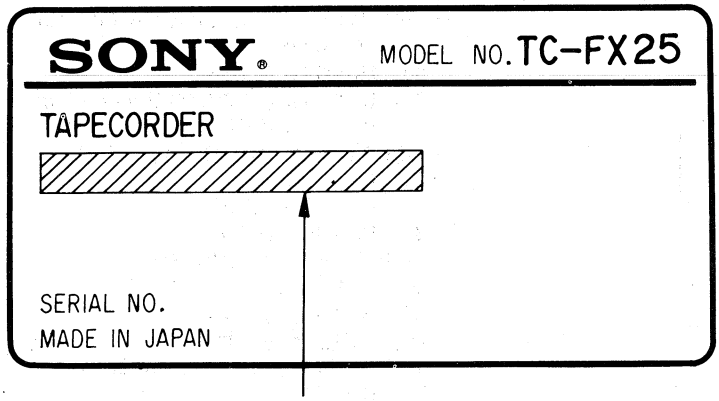
Power requirements	US, Canadian model: 120V ac, 60Hz AEP model: 220V ac, 50/60Hz (240V ac adjustable by authorized Sony personnel) UK model: 240V ac, 50/60Hz (220V ac adjustable by authorized Sony personnel) E model: 110, 120, 220 or 240V ac adjustable, 50/60Hz
Power consumption	US, Canadian model: 11 watts AEP, UK, E model: 12 watts
Dimensions	Approx. 430 x 105 x 275 mm (w/h/d) (17 x 4 1/4 x 10 7/8 inches) inlcuding projecting parts and controls
Weight	Approx. 4.2 kg (9 lbs 5 oz)

0 dB = 0.775 V

Tape Transport Mechanism Type	TCM-130V10

MODEL INDENTIFICATION

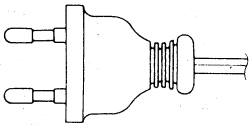
— Specification Label —



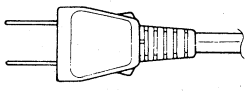
US, Canadian model: 120V 60Hz 11W
AEP model: 220V 50/60Hz 12W
UK model: 240V 50/60Hz 12W
E model: 110, 120, 220, 240V 50/60Hz 12W

— Power Cord —

E_1 model: euro-plug **1-555-734-00**

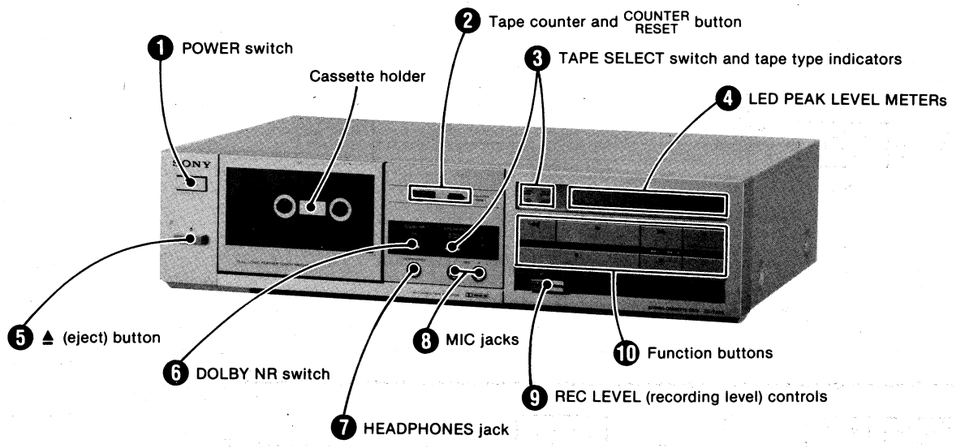


E_2 model: parallel-blade plug **1-551-472-00**



FUNCTION OF CONTROLS

The numbers in the photo are keyed to the following explanations.


1 POWER switch
2 Tape counter and COUNTER RESET button
3 TAPE SELECT switch and tape type indicators
Cassette holder
4 LED PEAK LEVEL METERs
5 ▲ (eject) button
6 DOLBY NR switch
7 HEADPHONES jack
8 MIC jacks
9 REC LEVEL (recording level) controls
10 Function buttons

❶POWER switch
This turns the power on or off. The peak level meters illuminate when the unit is turned on.

❷Tape counter and COUNTER RESET button
The tape counter provides a numerical reference point while recording which can be used to index a recorded cassette. To reset to zero, press the COUNTER RESET button.

❸TAPE SELECT switch and tape type indicators
Generally set this switch to AUTO (⎍). The automatic tape select system will then operate. When using a TYPE III (Fe-Cr) cassette or a TYPE IV (METAL) cassette which has no METAL tape detector slots, depress this switch to set it to the III Fe-Cr (IV METAL) position (⏢).
When inserting a cassette, one of the tape type indicators will light up depending on the type of tape and the position of the TAPE SELECT switch.

❹LED PEAK LEVEL METERs
These meters show the peak input level of each channel during recording, and recorded levels in the playback mode. They follow the transient peaks of high-level inputs that are too brief to be followed by conventional VU meters so that the optimum recording level can be accurately set.

❺▲ (eject) button
Press this button to open the cassette holder.

❻DOLBY NR switch
To record with the Dolby NR* (Noise Reduction) process, set this switch to the ON position. To record without the Dolby NR process, set this switch to the OFF position.
When playing back, set this switch to the same position used in recording.

* The Dolby NR system reduces tape hiss and improves the signal-to-noise ratio. During recording, low-level high-frequency signals, which tend to be obscured by tape hiss, are boosted so that they are audible above any tape noise. When these signals are played back, the level is lowered to the original input level so that the level of any tape noise is reduced to the same extent.

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❼HEADPHONES jack
Headphones may be inserted either to monitor the input signals to be recorded or to listen to a recording in the playback mode.

❽MIC jacks
Any low-impedance microphone equipped with a phone plug may be used. If your microphone is equipped with a mini plug, you will need a plug adaptor.

❾REC LEVEL (recording level) controls
These controls adjust the recording level. The upper slide bar is for the left channel and the lower for the right channel.

❿Function buttons
It is possible to switch directly from one mode to another. The indicator lamps light when the tape deck is in the forward, record or pause mode.

◄◄ (rewind) button : Press this button to rewind the tape.
► (forward) button : Press this button to play the tape back. To record, press this button while holding the ● button down.
►► (fast-forward) button : Press this button to advance the tape rapidly.
● (record) button : Press this button together with the ► button to start recording. Also press this button before adjusting the recording level.
■ (stop) button : To stop the tape, press this button. The tape will stop automatically when it is completely wound in either direction.
❚❚ (pause) button : To pause for a moment during recording or playback, press this button. This button is also used to control more precisely the start of recording, to release the record muting mode and for the cue and review functions.
● (record muting) button : Press this button to eliminate unwanted material and to insert a blank space during recording.

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

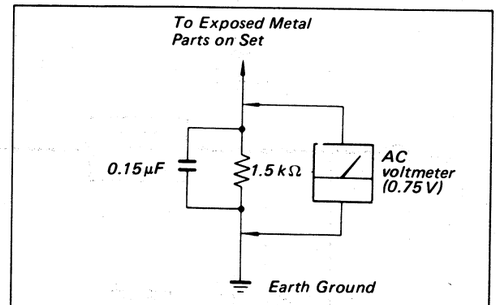
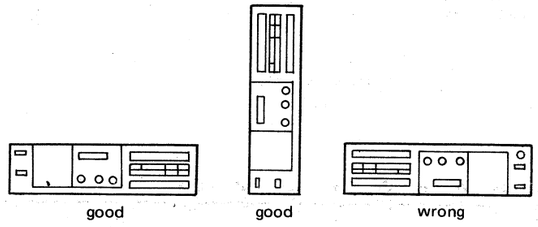


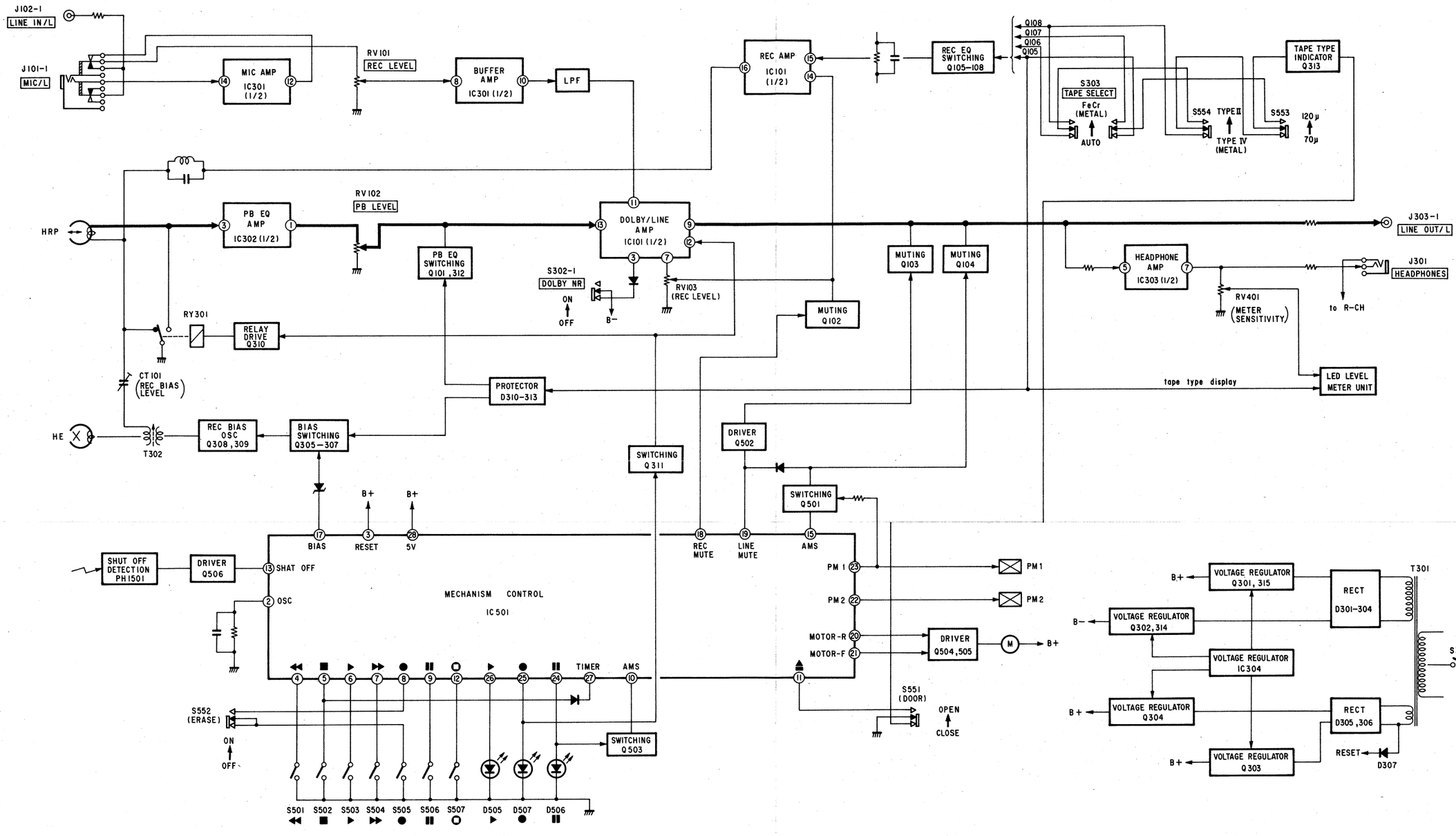
Fig. A. Using an AC voltmeter to check AC leakage.

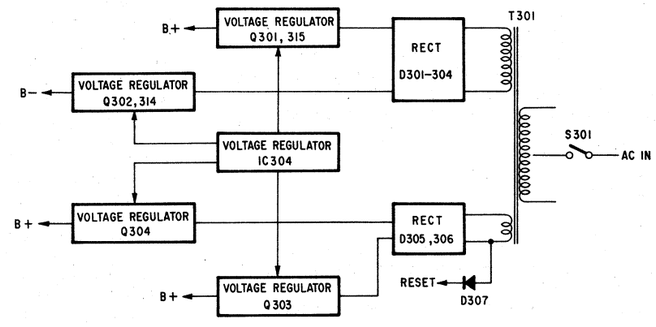
NOTES ON REPAIR

When the mechanism section is operated with the set in an upside-down position, misoperation may result. For repair while operating the mechanism section, perform with the set in its normal position or standing on its side.



SECTION 1
BLOCK DIAGRAM

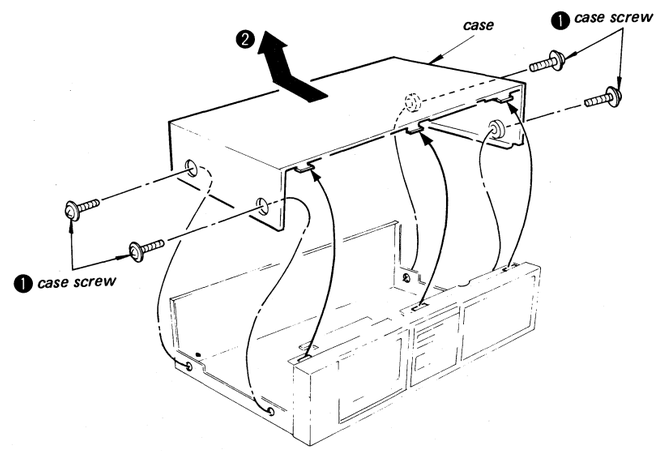




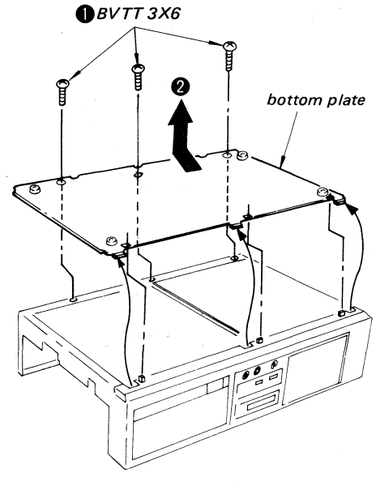
SECTION 2
DISASSEMBLY

- Follow the disassembly procedure in the numerical order given.

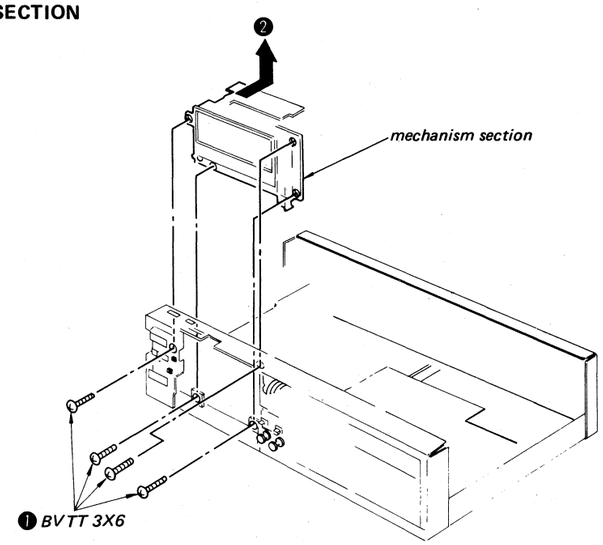
CASE



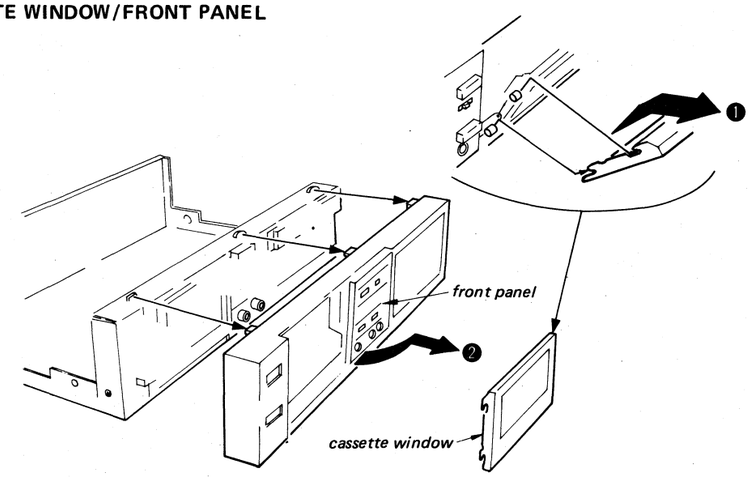
BOTTOM PLATE



MECHANISM SECTION



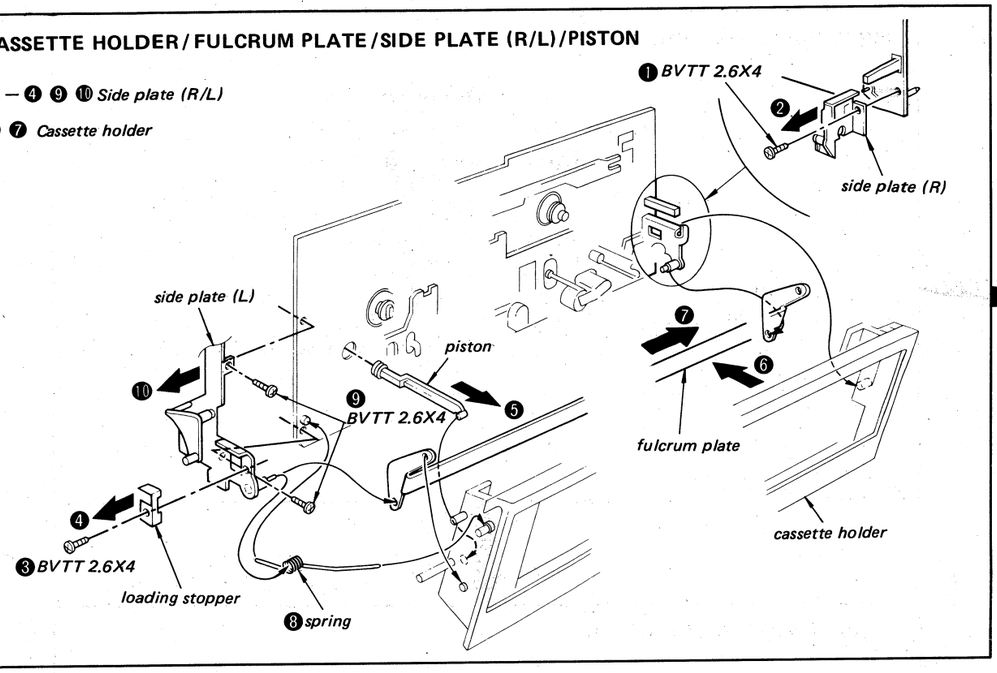
CASSETTE WINDOW/FRONT PANEL



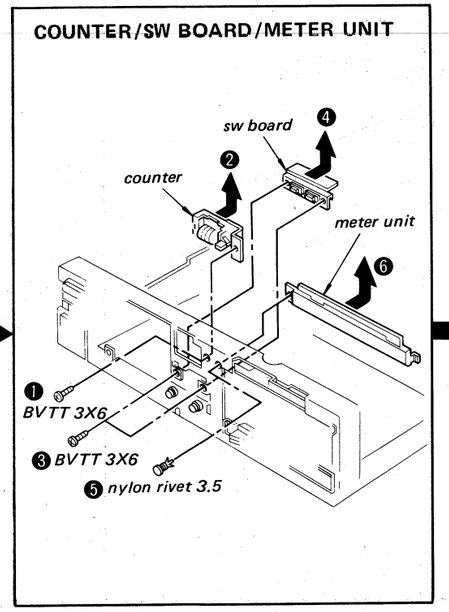
CASSETTE HOLDER / FULCRUM PLATE / SIDE PLATE (R/L) / PISTON

❶ — ❹ ❾ ❿ *Side plate (R/L)*

❻ ❼ *Cassette holder*



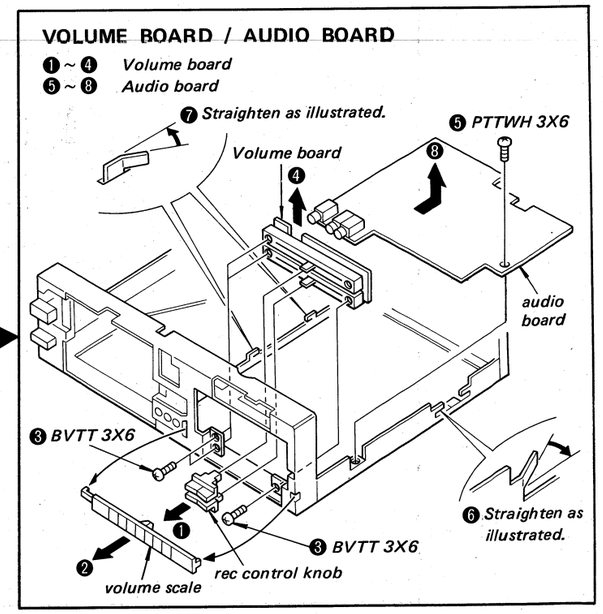
COUNTER/SW BOARD/METER UNIT



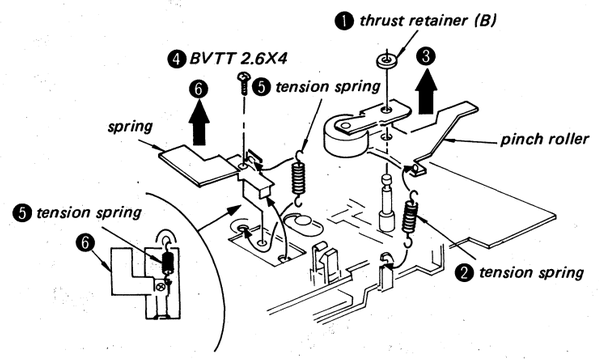
VOLUME BOARD / AUDIO BOARD

❶ ~ ❹ *Volume board*

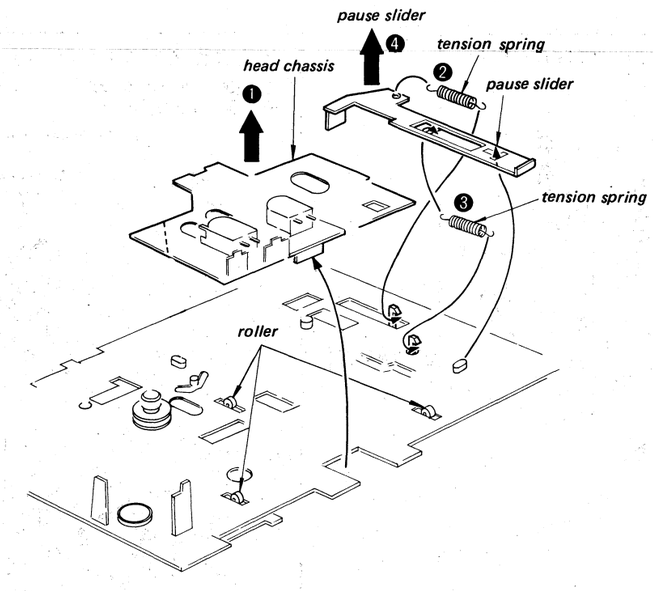
❺ ~ ❽ *Audio board*



PINCH ROLLER/SPRING

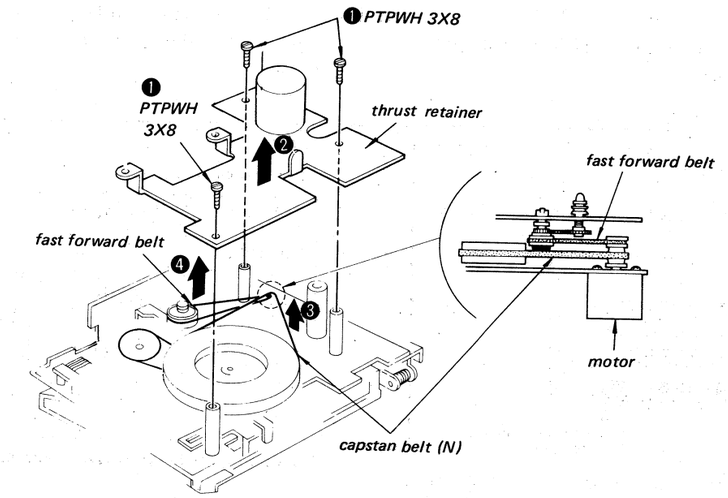


HEAD CHASSIS/PAUSE SLIDER



THRUST RETAINER / CAPSTAN BELT / FAST FORWARD BELT

❶❷ *thrust retainer*



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

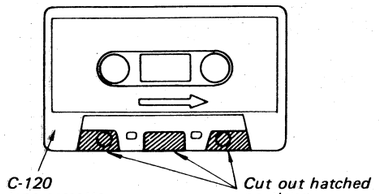
1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers

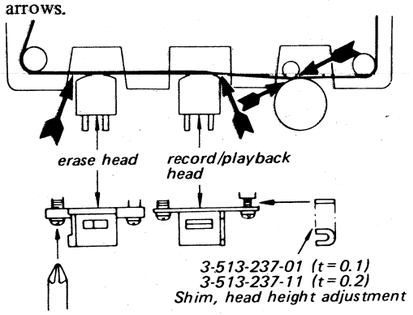
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Head Height Adjustment

1. Prepare an adjustment cassette as shown below.



2. In playback mode and viewing from the front, adjust the head heights to eliminate tape curl and tape twist at the portions shown by the arrows.



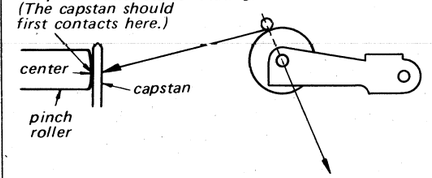
Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	30~50 g·cm (0.41~0.69 oz·inch)
Back Tension	CQ-102C	2.5~5 g·cm (0.03~0.06 oz·inch)
Fast Forward and Rewind	CQ-201B	80~150 g·cm (1.1~2.0 oz·inch)

Pinch Roller Pressure Measurement

– Playback Mode –

❷ *Slowly return the pinch roller and read the spring scale just when the pinch roller starts rotating. (The capstan should first contacts here.)*



❶ *tension gauge*

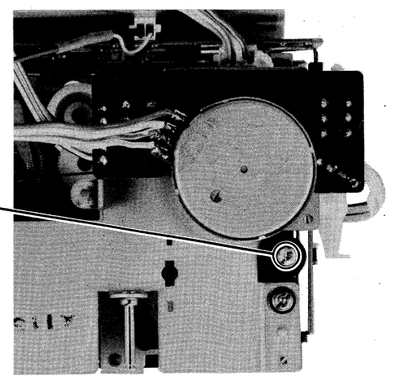
200~300 g·cm
(2.77~4.16 oz·inch)

Soft Eject Adjustment

Specification

Eject time
0.4~2.5 sec.

Set the tape (C-90) and adjust the adjustment screw so that the specified EJECT TIME is obtained.



3-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual. The adjustments should be performed for both L-CH and R-CH.

- Set the TAPE switches according to the tape as follows.

Tape	TAPE SELECT switch	LED display
CS-15	AUTO	I: NORM
CS-26	AUTO	II: CrO_2
CS-30	Fe-Cr (METAL)	III: Fe-Cr
CS-40	AUTO Fe-Cr (METAL)	IV: METAL

- Switches and controls should be set as follows unless otherwise specified.

  DOLBY NR switch: OFF
  TAPE switch: AUTO (I: NORM)

- Standard Record:

  Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

Standard Input Level

	MIC	LINE IN
source impedance	300Ω	10kΩ
input level	0.77mV (–60dB)	0.25V (–10dB)

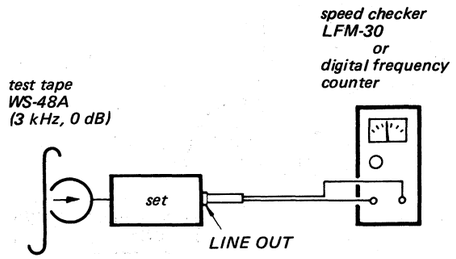
Standard Output Level

	HEADPHONES	LINE OUT
load impedance	8Ω	47kΩ
output level	31mV (–28dB)	0.435V (–5dB)

Capstan Motor Speed Adjustment

Procedure:

Mode: playback

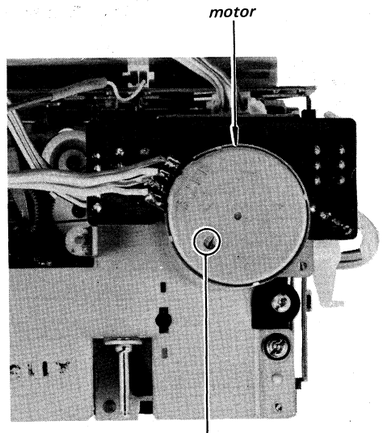


Specification:

Speed checker	Digital frequency counter
–0.8~+0.8%	2,975~3,025Hz

Frequency difference between the beginning and the end of the tape should be within 0.8% (25Hz).

Adjustment Location:

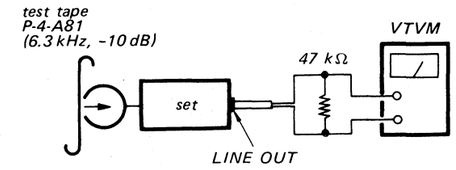


Adjust the speed by using screwdriver. When turning the screw clockwise, speed is faster.

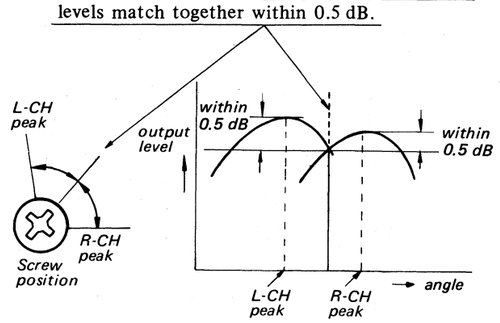
Record/playback Head Azimuth Adjustment

Procedure:

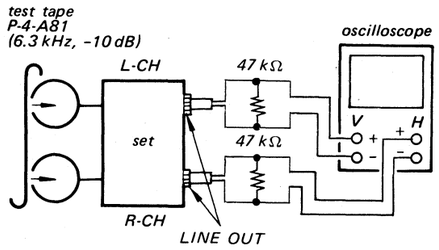
1. Mode: playback

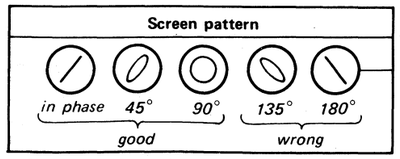


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 0.5 dB.

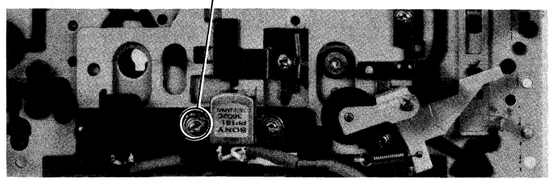


3. Phase Check
   Mode: playback





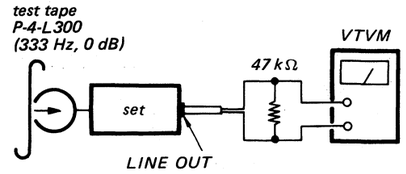
Adjustment Location:



Playback Level Adjustment

Procedure:

Mode: playback



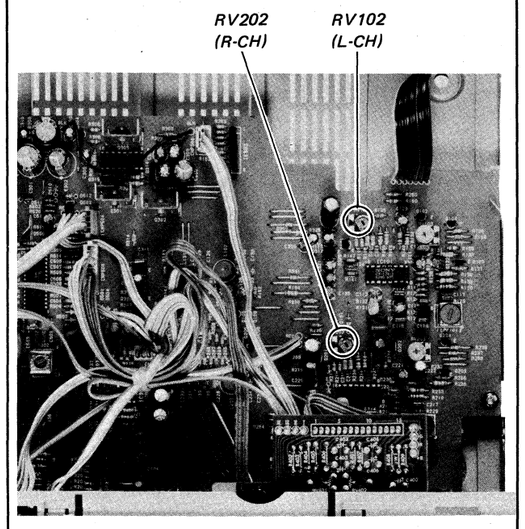
Specification:

LINE OUT level: 0.45 ~ 0.50 V
(–4.9 ~ –3.9 dB)
Level difference between channels:
less than 0.5 dB

Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location:

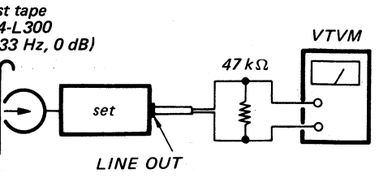
– AUDIO board –



k Level Adjustment

ure:

de: playback



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(−4.9 ~ −3.9 dB)
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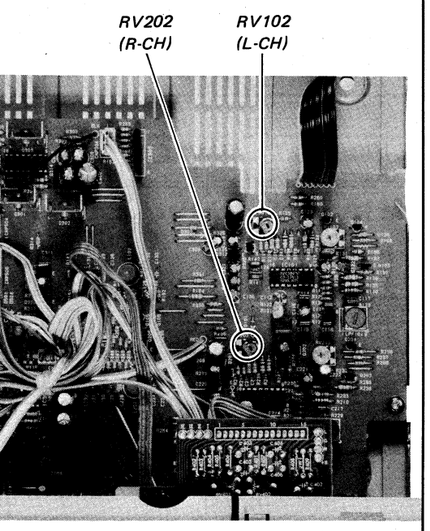
ment Location:

AUDIO board –



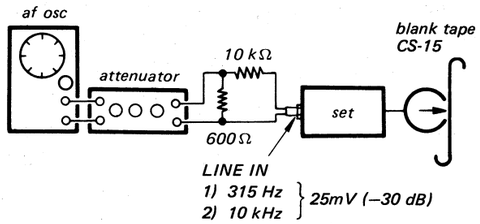
Record Bias Adjustment

Setting:

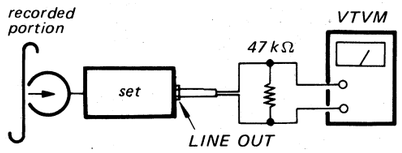
REC LEVEL control: standard record
(See page 13)

Procedure:

1. Mode: record



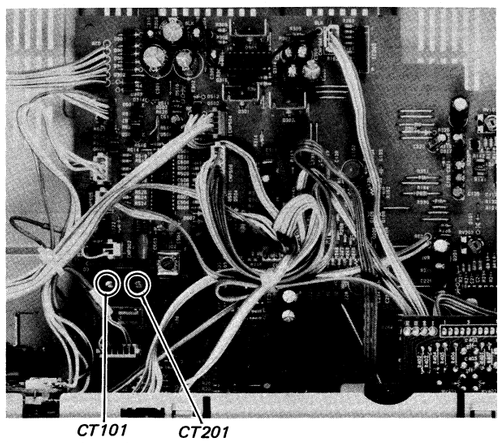
2. Mode: playback



Adjust CT101, CT201 so that the LINE OUT level of 10 kHz signal is 0 dB relative to that of 315 Hz.

Adjustment Location:

– AUDIO board –



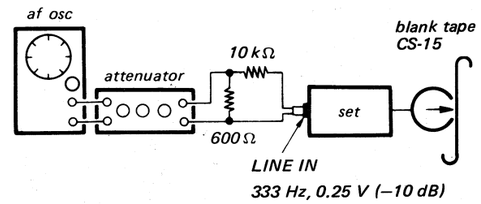
Record Level Adjustment

Setting:

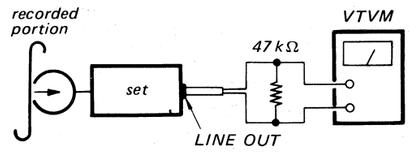
REC LEVEL control: standard record
(See page 13)

Procedure:

1. Mode: record



2. Mode: playback

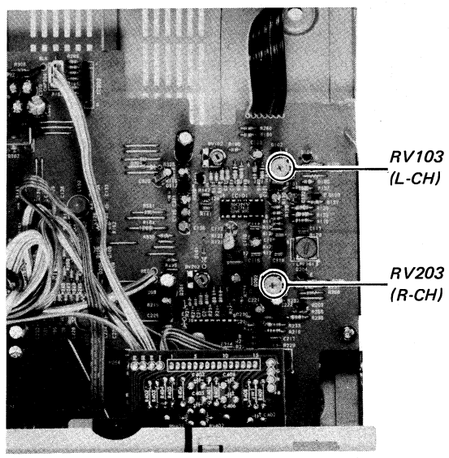


Specification:

LINE OUT level: 0.39 ~ 0.49 V
(−6 ~ −4 dB)

Adjustment Location:

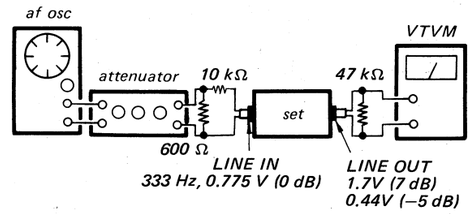
– AUDIO board –



Level Meter Calibration

Procedure:

1. Mode: record

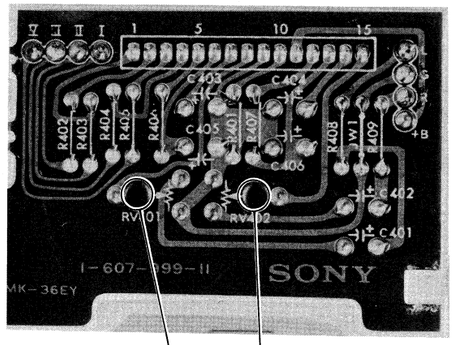


2. Set the REC LEVEL control so that the LINE OUT level is 0.44V (−5dB).
3. Adjust RV401 and RV402 so that the light in the 4th segment from the left of the LED meter goes on.
4. Set the REC LEVEL control so that the LINE OUT level is 1.9V (8dB). Make sure that lights in the segments go on.

Note: Slide the REC LEVEL control rightward slowly.

Adjustment Location:

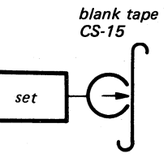
– METER DRIVE board –



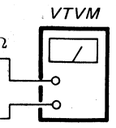
Terminal No.	Waveform or V
①	GND
②	1.2Vp-p, 1.2mse
③	4V dc
④	Rewind button is pus
⑤	Stop button is push
⑥	Forward button is pu
⑦	Fast Forward button
⑧	Record button is pu
⑨	Pause button is pus
⑩	Pause Mode
⑪	Door Close: 2.4V dc Open: 0V dc

TC-FX25/25B

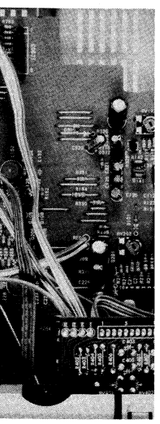
d record
ge 13)



25mV (–30 dB)



NE OUT level
hat of 315 Hz.



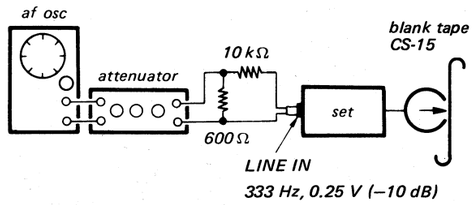
Record Level Adjustment

Setting:

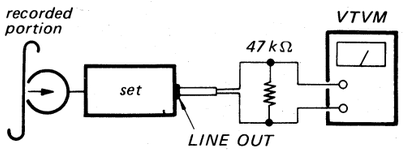
REC LEVEL control: standard record
(See page 13)

Procedure:

1. Mode: record



2. Mode: playback

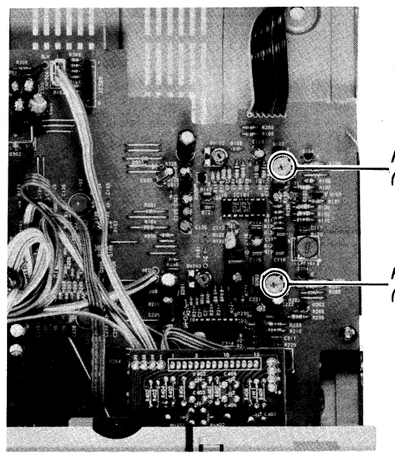


Specification:

LINE OUT level: 0.39 ~ 0.49 V
(–6 ~ –4 dB)

Adjustment Location:

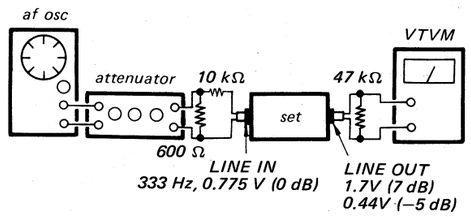
– AUDIO board –



Level Meter Calibration

Procedure:

1. Mode: record

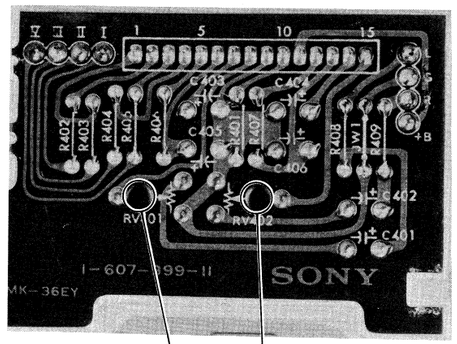


2. Set the REC LEVEL control so that the LINE OUT level is 0.44V (–5dB).
3. Adjust RV401 and RV402 so that the light in the 4th segment from the left of the LED meter goes on.
4. Set the REC LEVEL control so that the LINE OUT level is 1.9V (8dB). Make sure that lights in the segments go on.

Note: Slide the REC LEVEL control rightward slowly.

Adjustment Location:

– METER DRIVE board –



RV401 (L-CH) RV402 (R-CH)

Voltages and Waveforms at the Terminals of IC501

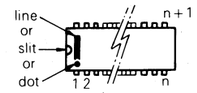
Terminal No.	Waveform or Voltage
①	GND
②	1.2Vp-p, 1.2msec
③	4V dc
④	4.4V / 0V — Rewind button is pushed
⑤	4.4V / 0V — Stop button is pushed
⑥	4.4V / 0V — Forward button is pushed
⑦	4.4V / 0V — Fast Forward button is pushed
⑧	4.4V / 0V — Record button is pushed
⑨	4.4V / 0V — Pause button is pushed
⑩	4.4V / 0.2V — Pause Mode
⑪	Door Close: 2.4V dc Open: 0V dc
⑫	4.4V / 0V — Record Muting button is pushed
⑬	5V / 0V — Tape End 0.8sec; 1.6sec Auto Shut-off Tape stops at the end of the tape from Forward Mode. (Voltage may fall to 0V by rotating angle of take-up reel spindle after shut-off mechanism operates.)
⑭	5V dc
⑮	Pause, Cue Mode: 4.7V / 0V
⑯	blank
⑰	Record Mode: 4.5V / 0V
⑱	4.5V / 0V — Record Mode
⑲	Forward Mode: 4.6V / 0.25V
⑳	Rewind Mode: 4.5V / 0V
㉑	Fast Forward, Forward Mode: 4.5V / 0V
㉒	Fast Forward Mode: 4.3V / 0V
㉓	Forward Mode: 4.3V / 0V
㉔	Pause Mode: 4.4V / 0V
㉕	Record Mode: 4.4V / 0V
㉖	Forward, Cue Mode: 4.3V / 0V
㉗	4.6V dc
㉘	5V dc

TC-FX25/25B TC-FX25/25B

SECTION 4
DIAGRAMS

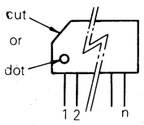
Semiconductor Lead Layouts

CX174A-2
CX10033
NJM4562D-D
CX10035
TC9310N-015

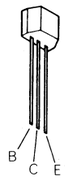


(Top view)

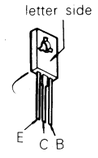
M5218L



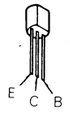
2SD1012



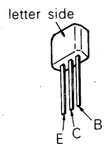
2SD809
2SB731



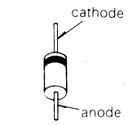
2SC945-P



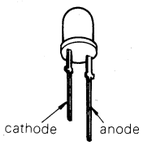
2SA1175



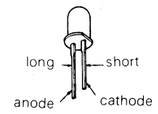
1SS133
10E-2
HZ9A2L



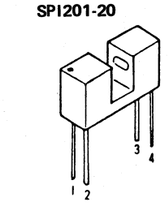
SLR-34URC5
SLR-34PC5

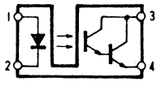


AA3432S

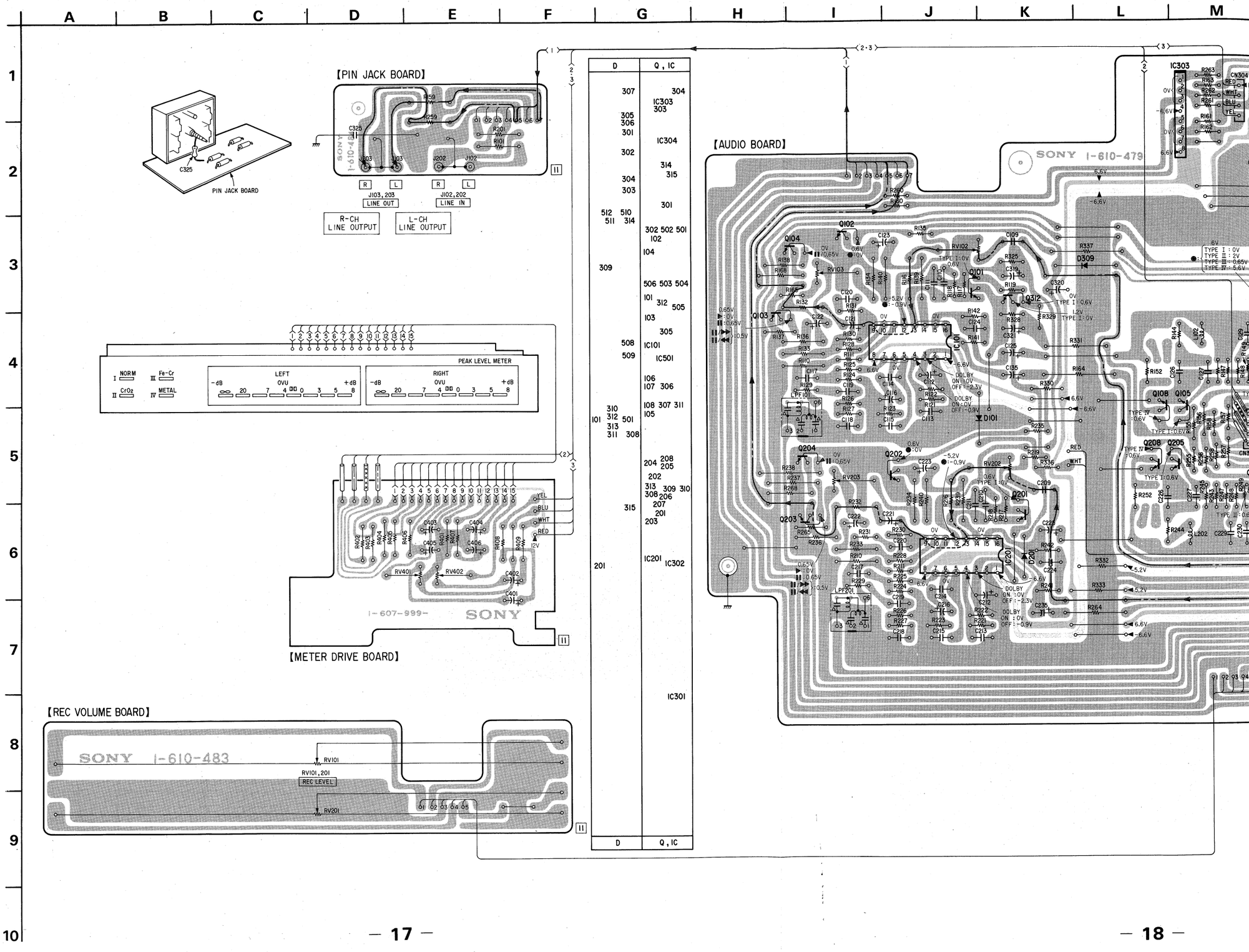


SPI201-20

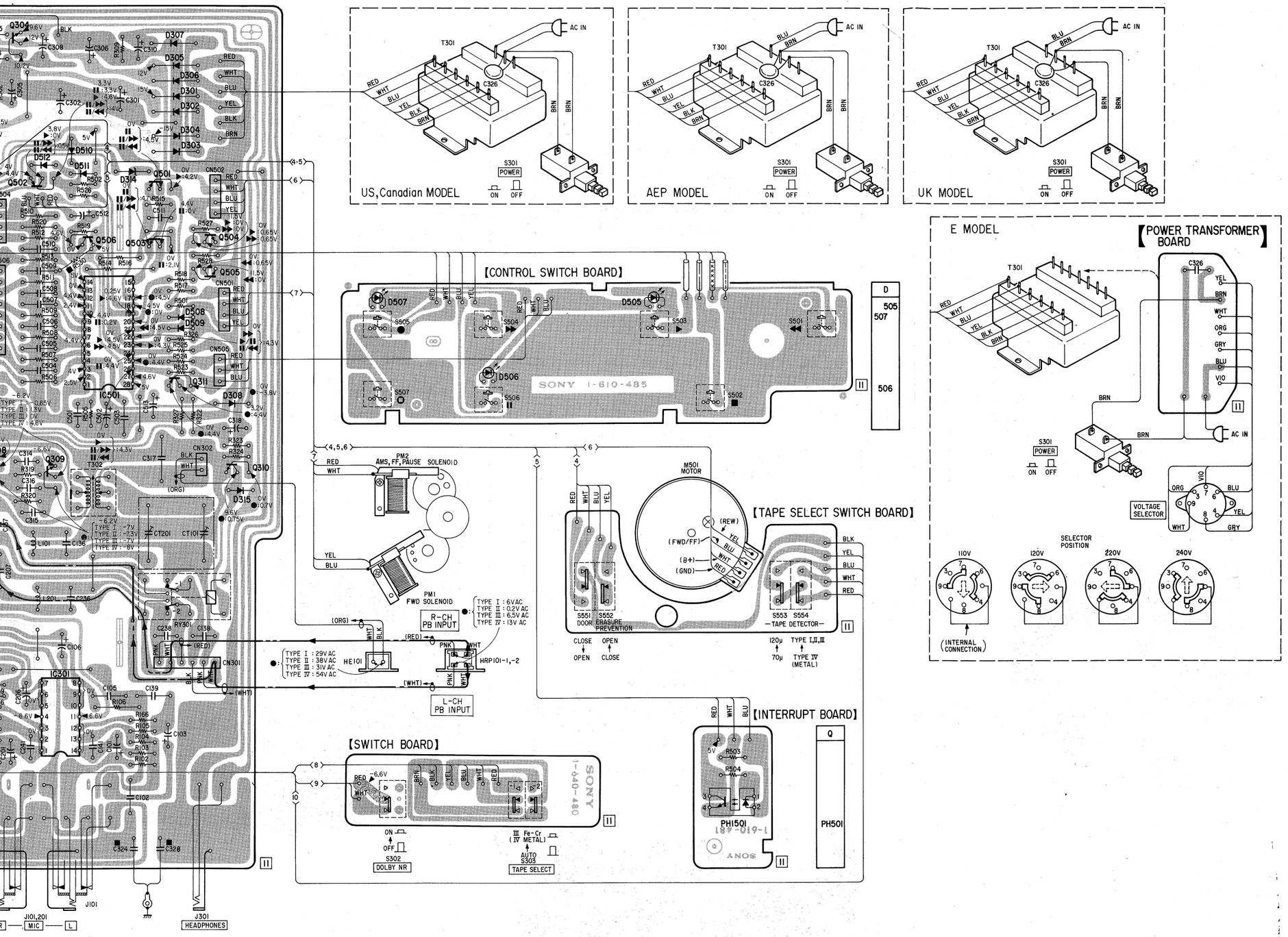




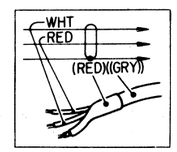
4-1. MOUNTING DIAGRAM



P Q R S T U V W X Y Z A1 B1



- Color code of sleeving over the end of the jacket.



- ○—: parts extracted from the component side.
- ■ : part mounted on the conductor side.
- : component-side pattern.
- : B + pattern
- : B − pattern
- : signal path
- : L-CH signal path
- : R-CH signal path

4-2. SCHEMATIC DIAGRAM

【AUDIO BOARD】

IC301 CX10033 MIC AMP

IC301 CX10033, BUFFER AMP

【REC VOLUME BOARD (1/2)】

【METER DRIVE BOARD】

【PIN JACK BOARD (1/3)】

IC302 NJM4562D PB EQ AMP

Q101 2SC945 PB EQ SWITCHING

Q311 2SA733 REC SWITCHING

Q312 2SC945 70μSec SWITCHING

IC101 CX174A-2 DOLBY/LINE AMP

Q102 2SD1020 REC MUTING

Q103,104 2SD1020 LINE OUT MUTING

IC303 M5218L HEADPHOE AMP

D309 ISS133

D101 ISS133

Q310 2SC945 RELAY DRIVE

D315 ISS133

Q105 108 2SC945 REC EQ SWITCHING

【SWITCH BOARD (1/2)】

Q313 2SA733 ROADING SWITCH

【TAPE SELECT SWITCH BOARD (1/2)】

Q308,309 2SC945 REC BIAS OSC

Q305,307 2SC945 Q306 2SA733 BIAS SWITCHING

D314 HZ9A2L

D310-313 ISS133

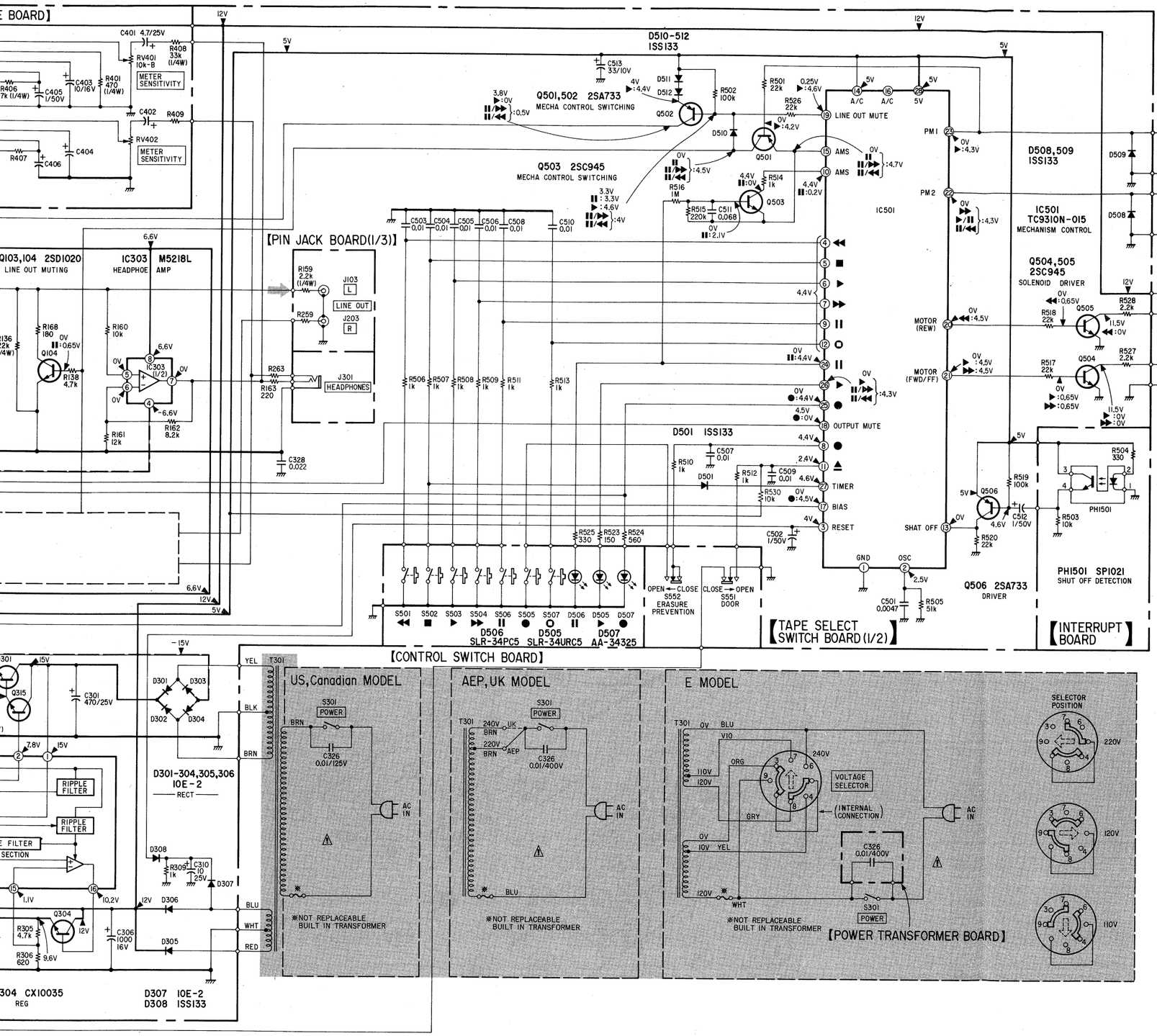
R-CH

Components for R-CH have same values as for L-CH.

Q302 2SB731 Q314 2SA733 Q301,303 2SD809 Q315,304 2SC945 REG

IC304 CX10035 REG

D307 10E D308 ISS



Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

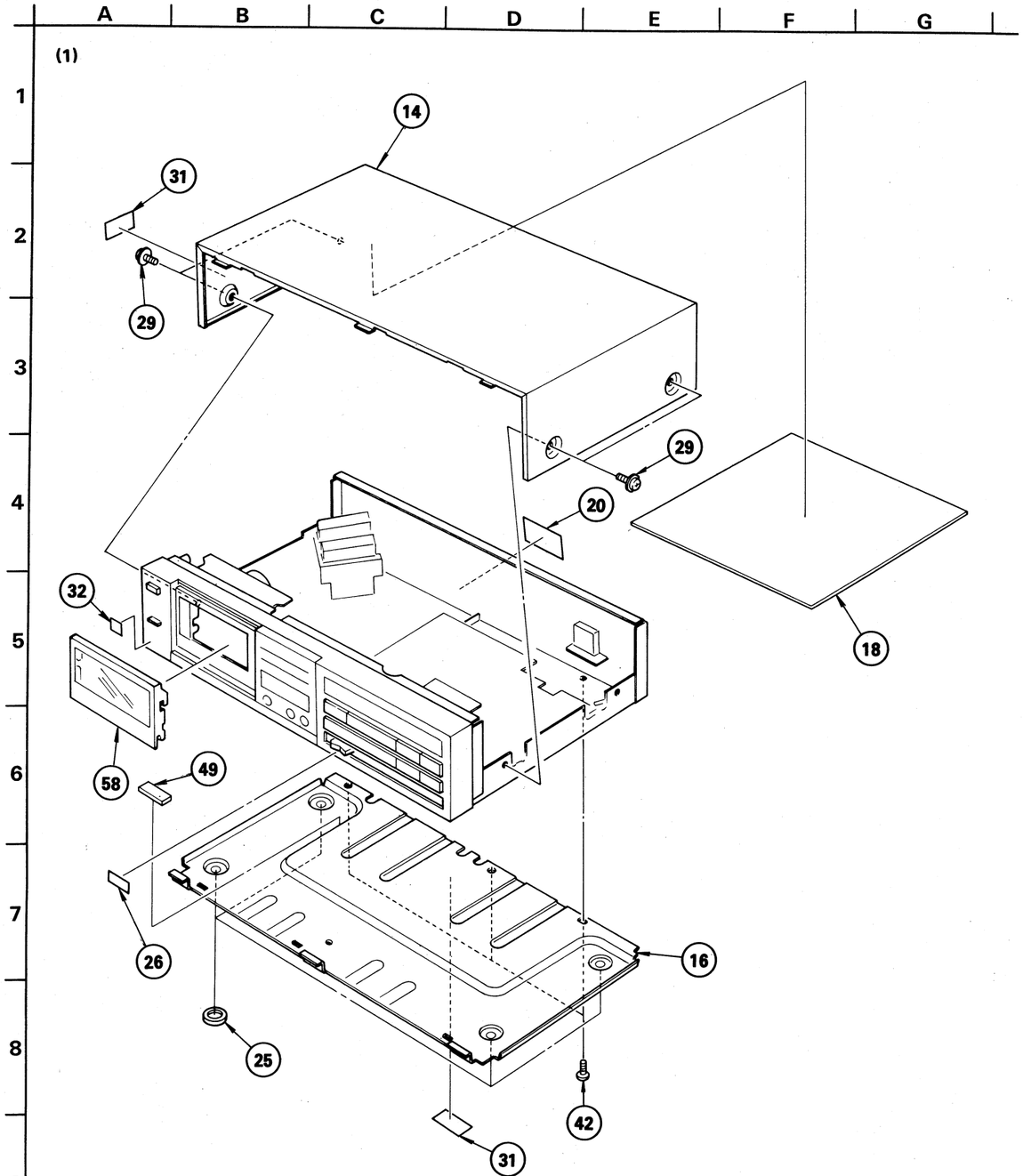
Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- ⏦ : fusible resistor.
- △ : internal component.
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——— : B+ bus.
- – – – : B– bus.
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
  - ▶ : FWD
  - ▶▶ : FF
  - ◀◀ : REW
  - ● : REC
  - ❚❚ : PAUSE
  - ❚❚/▶▶, ❚❚/◀◀ : CUE
- Voltage variations may be noted due to normal production tolerances.
- AC voltage readings in the bias oscillator with a VTVM.
- ➡ : signal path

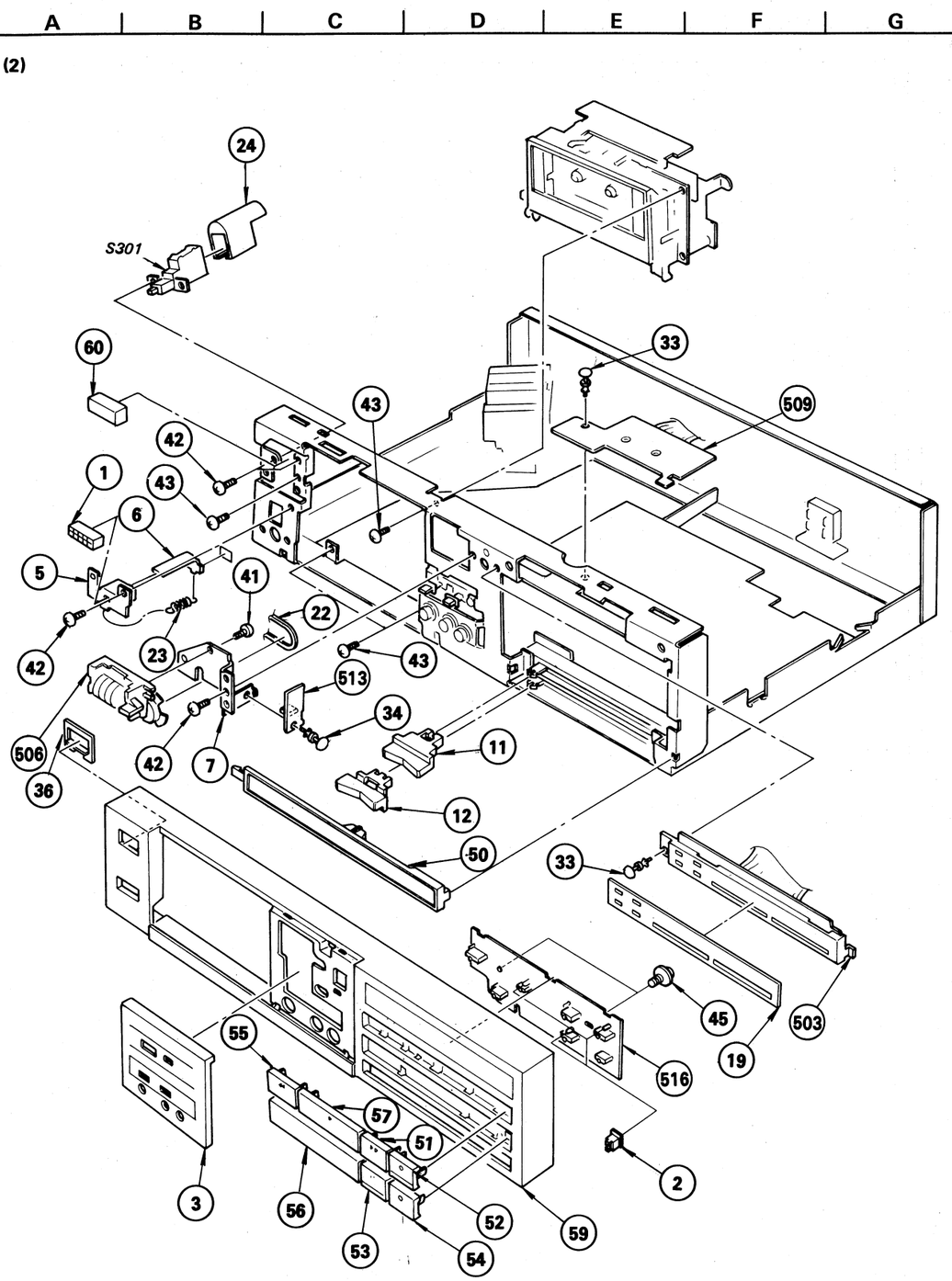
Note: Voltages are measured with a VOM (50kΩ/V).

SECTION 5
EXPLODED VIEWS AND PARTS LIST

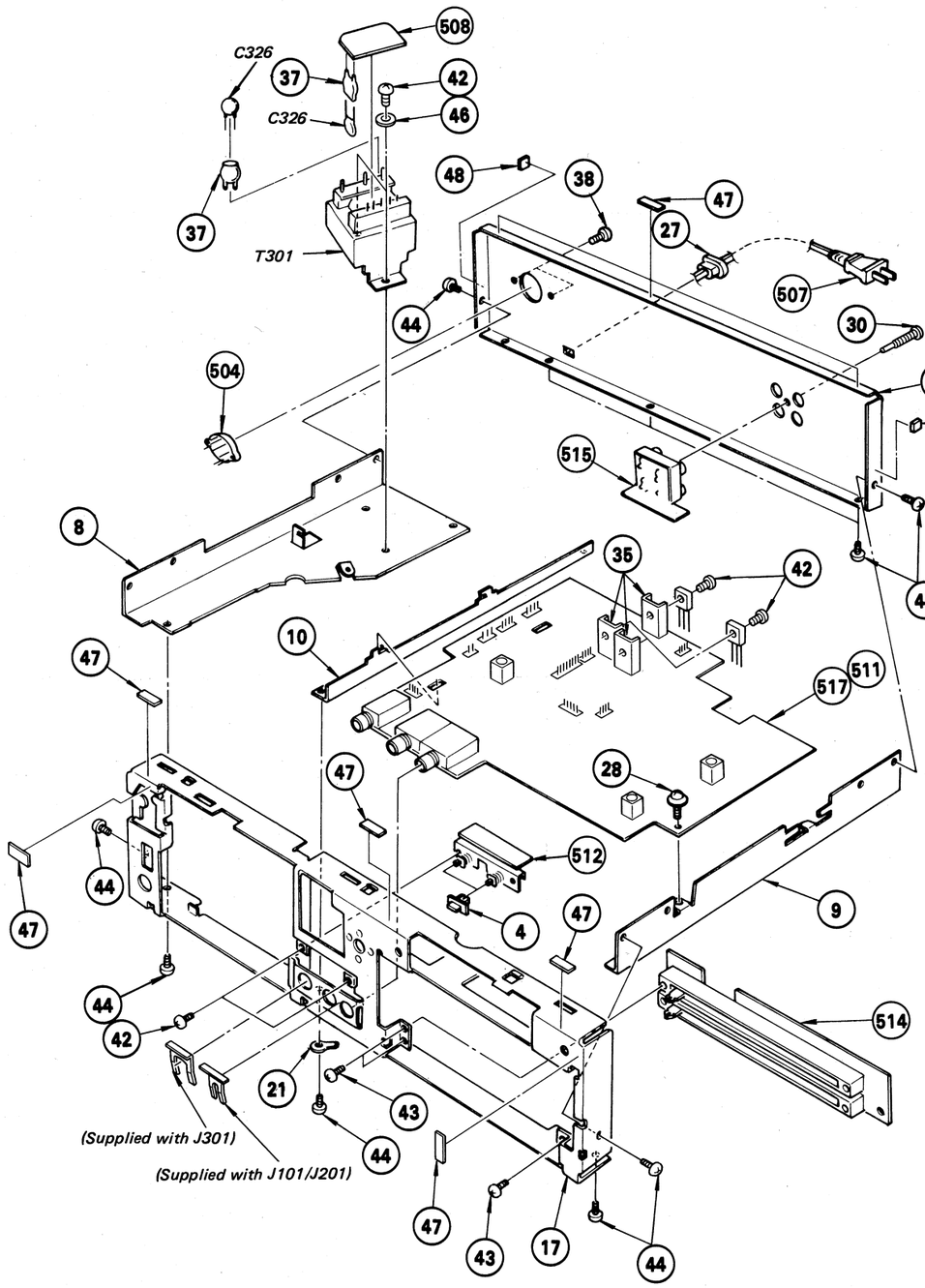
(1)



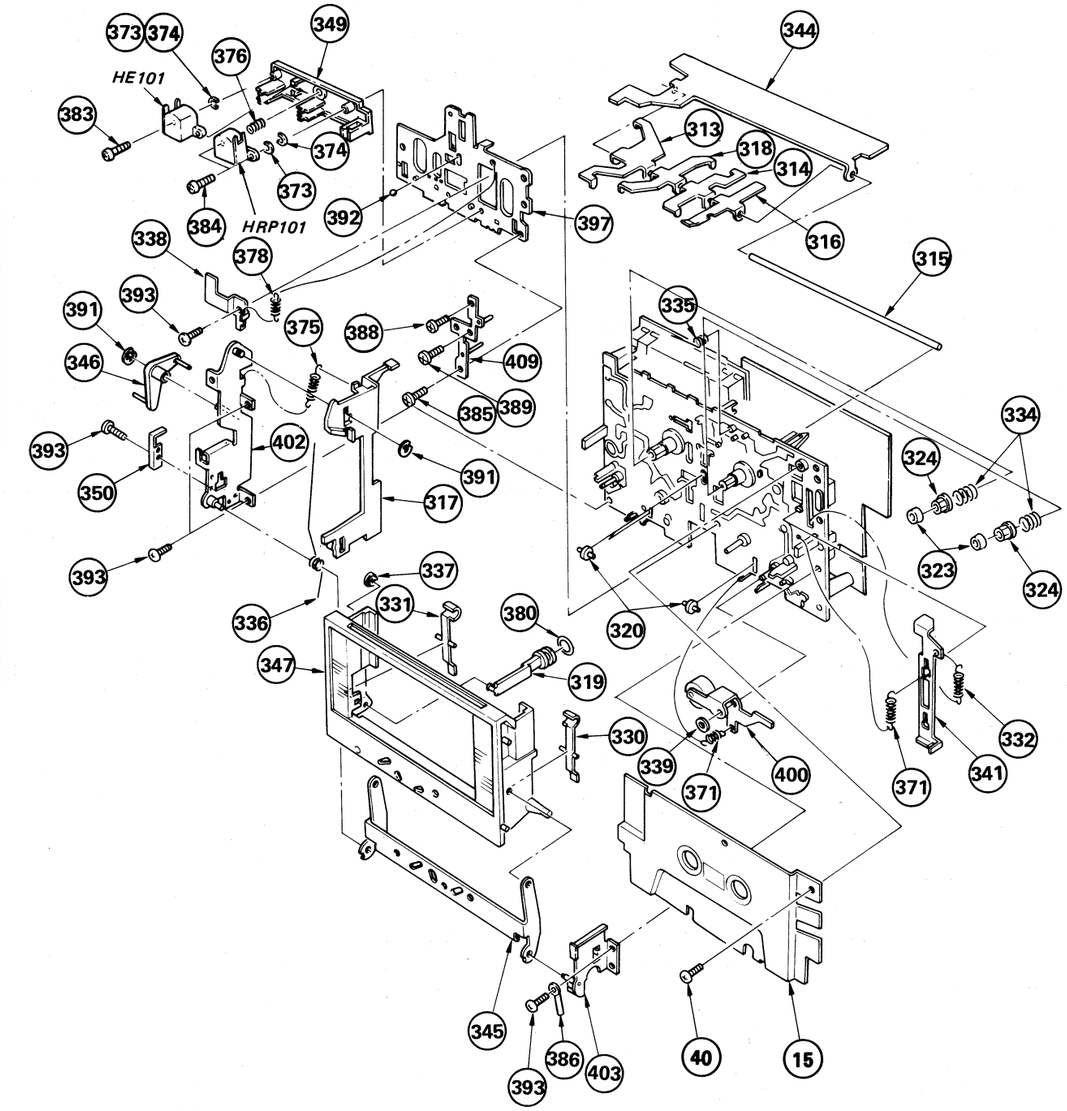
(2)



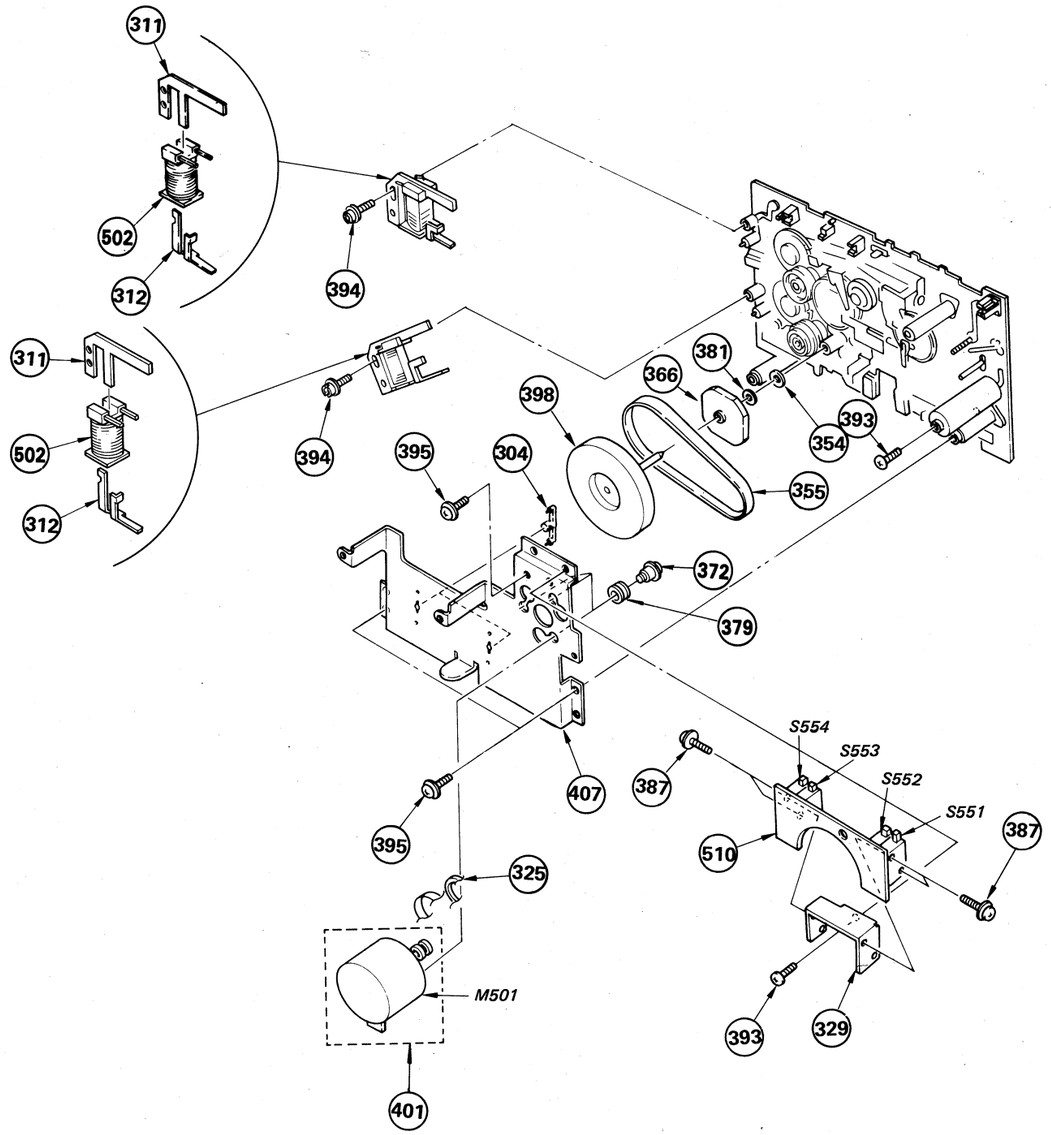
(3)


C326
C326
T301
(Supplied with J301)
(Supplied with J101/J201)

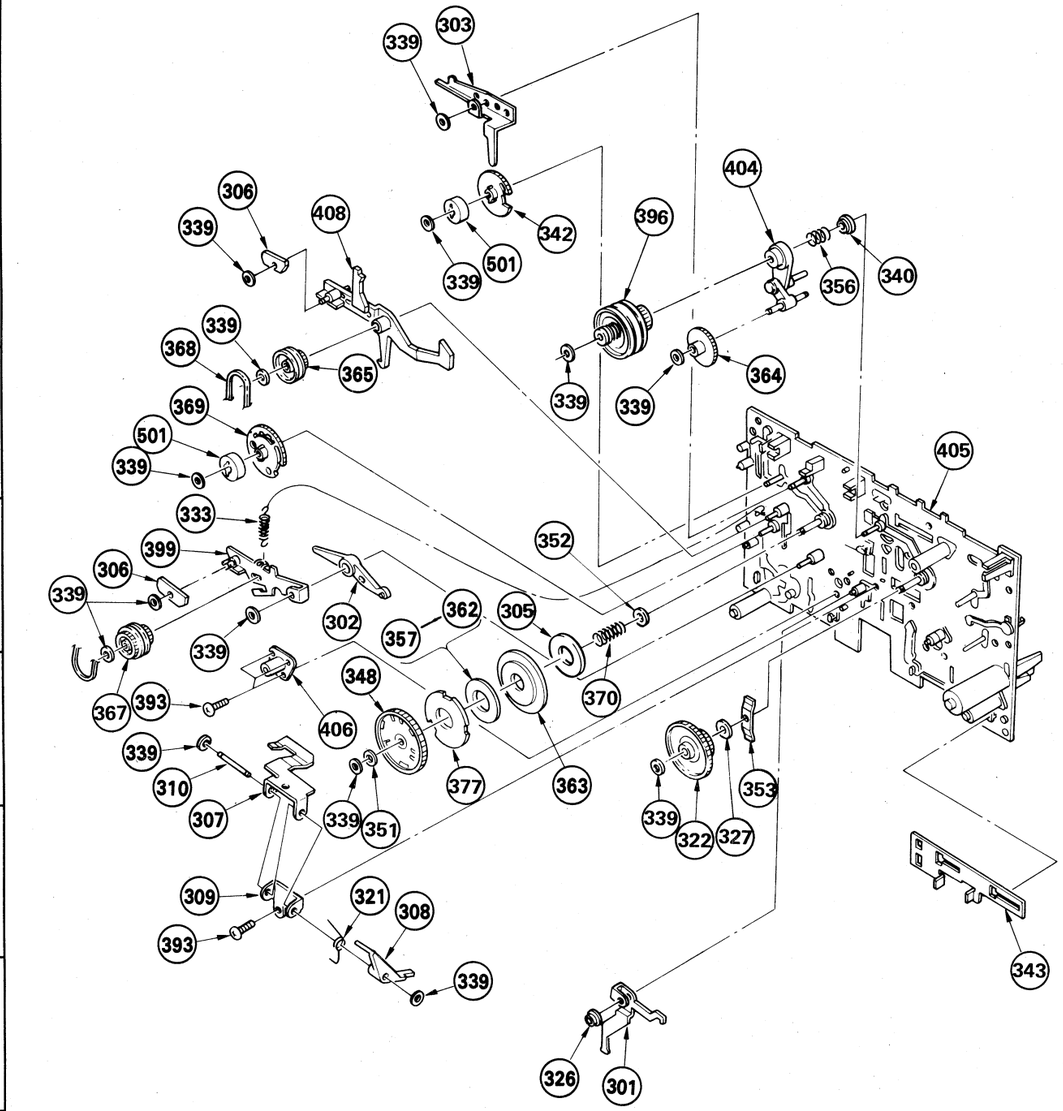
(4)


HE101
HRP101

(5)


311
502
312
394
311
502
312
394
395
304
398
366
381
354
393
355
372
379
407
395
387
S554
S553
S552
S551
510
387
325
M501
393
329
401

(6)


339
303
306
339
408
342
339
501
404
396
356
340
339
368
365
339
339
364
369
501
339
405
333
352
399
306
339
302
357
362
305
339
348
367
393
406
370
339
310
307
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363
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351
353
339
322
327
309
321
308
393
339
343
326
301

GENERAL SECTION

No.	Part No.	Description
1	3-304-419-31	(BLACK).....BUTTON, EJECT
1	3-304-419-41	(SILVER)....BUTTON, EJECT
2 ♦	3-307-417-00	RETAINER, LED
3	3-307-511-31	(SILVER)....ESCUTCHEON
3	3-307-511-41	(BLACK).....ESCUTCHEON
4	3-307-515-00	(BLACK).....BUTTON, DOLBY
4	3-307-515-11	(SILVER)....BUTTON, DOLBY
5 ♦	3-307-517-00	GUIDE, SLIDER
6 ♦	3-307-518-00	PLATE, SLIDE
7 ♦	3-307-519-00	BRACKET, COUNTER
8 ♦	3-307-525-00	PLATE, SIDE, LEFT
9 ♦	3-307-526-00	PLATE, SIDE, RIGHT
10 ♦	3-307-527-00	PLATE, RELAY
11	3-307-528-11	(BLACK).....KNOB (LEFT), REC CONTROL
11	3-307-528-21	(SILVER)....KNOB (LEFT), REC CONTROL
12	3-307-529-11	(BLACK).....KNOB (RIGHT), REC CONTROL
12	3-307-529-21	(SILVER)....KNOB (RIGHT), REC CONTROL
13 ♦	3-307-530-24	(E).....PLATE, JACK
13 ♦	3-307-530-31	(US,Canadian,AEP,UK)...PLATE, JACK
14	3-307-532-00	(SILVER)....CASE
14	3-307-532-11	(BLACK).....CASE
15	3-307-533-00	PLATE, ORNAMENTAL, MD
16 ♦	3-307-540-00	PLATE, BOTTOM
17 ♦	3-307-541-00	CHASSIS, AMPLIFIER
18 ♦	3-307-563-00	SHEET, VIBRATION PROOF
19	3-307-578-00	(SILVER)....PLATE, ORNAMENTAL, METER
20	3-307-579-00	(US,Canadian)...LABEL, MODEL NUMBER (U,CND)
20	3-307-582-00	(E).....LABEL, MODEL NUMBER (E1,E2)
20	3-307-580-00	(AEP;SILVER)....LABEL, MODEL NUMBER (AEP1)
20	3-307-583-00	(AEP;BLACK).....LABEL, MODEL NUMBER (AEP1)
20	3-307-581-00	(UK;SILVER).....LABEL, MODEL NUMBER (UK)
20	3-307-584-00	(UK;BLACK).....LABEL, MODEL NUMBER (UK)
21	3-460-077-00	CLAMP, WIRE
22	3-480-135-00	BELT
23	3-540-244-00	SPRING, TENSION
24	3-575-524-00	COVER, POWER SWITCH
25	3-576-731-00	FELT (H)
26	3-701-690-00	(UK).....LABEL (MADE IN JAPAN)
27 ⚠	3-703-244-00	BUSHING, CORD
28	3-703-249-01	SCREW, S TIGHT, +PTTWH 3X6
29	3-703-354-01	(BLACK).....SCREW (OS), CASE, CLAW
29	3-703-354-11	(SILVER)....SCREW (OS), CASE, CLAW

GENERAL SECTION

No.	Part No.	Description
30	3-703-473-00	SCREW, TERMINAL
31 ♦	3-703-680-00	(US)....LABEL, CAUTION, SUB, NEW UL
32	3-703-710-01	STICKER, SONY SYMBOL (12)
33	4-812-134-00	RIVET NYLON, 3.5
34	4-812-134-11	RIVET NYLON, 3.5
35 ♦	4-861-002-11	HEAT SINK
36	4-871-324-02	ESCUTCHEON, POWER KNOB
37	4-875-455-01	(AEP,UK,E)...COVER (DIA.20) CAPACITOR
38	7-682-547-09	(E)....SCREW +B 3X6
39	.....	
40	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT
41	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
42	7-685-871-01	SCREW +BVTT 3X6 (S)
43	7-685-871-09	SCREW +BVTT 3X6 (S)
44	7-685-872-01	SCREW +BVTT 3X8 (S)
45	7-687-246-21	SCREW, TOTSU PTPWH 3X8, TYPE2
46	7-688-004-11	W 4, MIDDLE
47	9-911-837-XX	CUSHION, FILTER
48	9-911-840-XX	RUBBER (B)
49	9-911-851-XX	CUSHION
50	X-3307-501-0	(SILVER)....PLATE ASSY, ORNAMENTAL, BUTTON
50	X-3307-521-0	(BLACK).....PLATE ASSY, ORNAMENTAL, BUTTON
51	X-3307-517-0	(BLACK).....BUTTON ASSY, FF
51	X-3307-529-0	(SILVER)....BUTTON ASSY, FF
52	X-3307-518-0	(BLACK).....BUTTON ASSY, REC
52	X-3307-533-0	(SILVER)....BUTTON ASSY, REC
53	X-3307-519-0	(BLACK).....BUTTON ASSY, PAUSE
53	X-3307-528-0	(SILVER)....BUTTON ASSY, PAUSE
54	X-3307-520-0	(BLACK).....BUTTON ASSY, REC MUTE
54	X-3307-527-0	(SILVER)....BUTTON ASSY, REC MUTE
55	X-3307-522-0	(BLACK).....BUTTON ASSY, REW
55	X-3307-530-0	(SILVER)....BUTTON ASSY, REW
56	X-3307-523-0	(BLACK).....BUTTON ASSY, STOP
56	X-3307-532-0	(SILVER)....BUTTON ASSY, STOP
57	X-3307-524-0	(BLACK).....BUTTON ASSY, FWD
57	X-3307-531-0	(SILVER)....BUTTON ASSY, FWD
58	X-3307-525-0	(BLACK).....WINDOW ASSY, CASSETTE
58	X-3307-534-0	(SILVER)....WINDOW ASSY, CASSETTE
59	X-3307-535-0	(SILVER)....PANEL SUB ASSY, FRONT
59	X-3307-536-0	(BLACK).....PANEL SUB ASSY, FRONT
60	X-3575-502-0	(SILVER)....KNOB ASSY, POWER
60	X-3575-502-7	(BLACK).....KNOB ASSY, POWER

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- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:
- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS
- MMH : mH, UH : μH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ACCESSORY & PACKING MATERIAL

No.	Part No.	Description
101	1-551-734-11	CORD, CONNECTION (RK- 74A)
102	3-307-554-00	CUSHION (RIGHT), UPPER
103	3-307-555-00	CUSHION (LEFT), UPPER
104	3-307-556-00	CUSHION (RIGHT), LOWER
105	3-307-557-00	CUSHION (LEFT), LOWER
106	3-307-562-00	LABEL, CAUTION, TAPE SELECT
107	3-307-587-00	(SILVER)...INDIVIDUAL CARTON
108	3-307-588-00	(BLACK)....INDIVIDUAL CARTON
109	3-701-630-00	BAG, POLYETHYLENE
110	3-773-408-11	(AEP,UK,E).....MANUAL, INSTRUCTION
111	3-773-408-21	(US,Canadian)...MANUAL, INSTRUCTION
112	3-773-408-31	(Canadian).....MANUAL, INSTRUCTION
113	3-773-408-41	(AEP).....MANUAL, INSTRUCTION
114	3-793-828-11	QUESTIONNAIRE
115	4-876-352-00	SHEET, PROTECTION
116	8-890-454-10	(Canadian)...TAPE (UCX-S)
117	X-3701-105-0	ROD ASSY, CLEANING, HEAD

MECHANISM SECTION

No.	Part No.	Description
301	♦;3-307-301-00	LEVER (RELAY), FWD SELECT
302	3-307-307-00	LEVER, FWD
303	3-307-308-00	LEVER, FF
304	3-307-309-00	RETAINER (A), THRUST
305	3-307-313-00	PLATE, YOKE
306	3-307-315-00	ARBOR, MOVABLE
307	3-307-319-00	RETAINER, TAKE-UP GEAR
308	3-307-328-00	LEVER, TAKE-UP SELECTION
309	♦;3-307-329-00	PLATE, FULCRUM, SELECTION LEVER
310	3-307-330-00	PIN, FULCRUM PLATE
311	3-307-332-00	ARBOR, FIXED
312	3-307-333-00	ARBOR, TRIGGER
313	♦;3-307-337-00	LEVER, REC DETECTION
314	♦;3-307-338-00	LEVER, METAL DETECTION
315	♦;3-307-339-00	SHAFT, DETECTION LEVER
316	♦;3-307-344-00	LEVER, HALF RETAINER
317	3-307-345-00	SLIDER, EJECT
318	♦;3-307-346-00	LEVER, DETECTION
319	3-307-347-00	PISTON
320	3-307-348-00	ROLLER
321	3-307-355-00	SPRING

MECHANISM SECTION

No.	Part No.	Description
322	3-307-360-00	GEAR (S), REEL
323	3-307-362-00	CAP, REEL
324	3-307-363-00	CLAW (N), REEL
325	3-307-366-00	BELT, FAST FORWARD
326	3-307-367-00	BUSHING, SELECT LEVER
327	3-307-369-00	FELT, LIMITER
328	.....	
329	♦;3-307-370-00	BRACKET, SWITCH
330	3-307-371-00	SPRING (LEFT)
331	3-307-372-00	SPRING (RIGHT)
332	3-307-374-00	SPRING, TENSION
333	3-307-378-00	SPRING, TENSION
334	3-307-380-00	SPRING, COMPRESSION
335	3-307-382-00	SPRING
336	3-307-383-00	SPRING
337	3-307-390-00	BUSHING, LOADING SPRING
338	3-307-391-00	SPRING
339	3-307-394-00	RETAINER (B), THRUST
340	3-307-395-00	RETAINER, SPRING
341	3-307-397-00	SLIDER, PAUSE
342	3-307-401-00	GEAR, FF CAM
343	♦;3-307-403-00	SLIDER, FWD
344	♦;3-307-404-00	RETAINER, DETECTION SWITCH
345	♦;3-307-405-00	PLATE, FULCRUM, CASSETTE HOLDER
346	3-307-406-00	LEVER, EJECT
347	3-307-407-31	HOLDER, CASSETTE
348	3-307-412-00	GEAR, TAKE-UP REEL
349	3-307-414-00	BRACKET, HEAD
350	3-307-416-00	STOPPER, LOADING
351	3-307-465-00	RETAINER, TAKE-UP
352	♦;3-307-467-00	RETAINER, SPRING
353	3-307-475-00	PLATE, TENSION, BACK
354	3-307-482-00	WASHER, LUMILER
355	3-307-483-00	BELT (R), CAPSTAN
356	3-307-486-00	SPRING, COMPRESSION
357	3-307-493-01	SPACER
358	3-307-493-11	SPACER
359	3-307-493-21	SPACER
360	3-307-493-31	SPACER
361	3-307-493-41	SPACER
362	3-307-493-51	SPACER
363	3-307-953-00	MAGNET, REEL TABLE
364	3-307-970-00	GEAR, FR
365	3-312-405-00	PULLEY, DRIVING
366	3-312-406-00	GEAR (T), PINION

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CAPACITORS:

- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS

- MMH : mH, UH : μH

MECHANISM SECTION

No.	Part No.	Description
367	3-312-408-00	GEAR (B), CONVERSION
368	3-312-409-00	BELT, DRIVING
369	3-312-412-00	GEAR (B), CAM, FWD
370	3-312-429-00	SPRING, COMPRESSION
371	3-312-432-00	SPRING, TENSION
372	3-570-027-00	SCREW, MOTOR
373	3-513-237-01	PLATE
374	3-513-237-11	PLATE
375	3-531-541-00	SPRING, TENSION
376	3-539-237-00	SPRING (3), COMPRESSION
377	3-561-827-00	PLATE (A), HYSTERESIS
378	3-570-895-02	SPRING, TENSION
379	3-570-118-00	CUSHION, MOTOR
380	3-575-392-00	RING, PISTON
381	3-701-438-11	WASHER, 2.5
382	.....	
383	3-701-465-00	SCREW, LOCK
384	3-701-466-00	SCREW, LOCK
385	3-701-467-00	SCREW, LOCK
386 ♦	3-701-822-00	HOLDER, WIRE
387	7-621-760-05	+PSW, 2.6X16
388	7-621-770-20	SCREW +B 2X5
389	7-621-772-00	SCREW +B 2X3
390	.....	
391	7-624-105-04	STOP RING 2.3, TYPE -E
392	7-671-111-11	STEEL, BOUL 1.5MM
393	7-685-860-04	SCREW +BVTT 2.6X4 (S)
394	7-687-204-21	TOTSU PTPWH 2X6 NON-SLIT, TYPE2
395	7-687-246-21	SCREW, TOTSU PTPWH 3X8, TYPE2
396	A-2142-022-A	PULLEY ASSY, FR
397	X-3307-301-0	CHASSIS (N) ASSY, HEAD
398	X-3307-302-5	FLYWHEEL (N) ASSY
399 ♦	X-3307-305-0	LEVER ASSY, FWD LOCK
400	X-3307-307-0	PINCH ROLLER (N) ASSY
401	X-3307-308-3	MOTOR (N) ASSY
402 ♦	X-3307-309-0	PLATE (LEFT) ASSY, SIDE
403 ♦	X-3307-310-0	PLATE (RIGHT) ASSY, SIDE
404	X-3307-312-0	LEVER ASSY, FR
405	X-3307-330-1	CHASSIS (N) ASSY, MECHANICAL
406	X-3307-338-0	BEARING ASSY, CAPSTAN
407 ♦	X-3307-345-0	RETAINER ASSY, THRUST
408	X-3307-348-0	LEVER ASSY, FF LOCK
409	X-3307-920-0	PLATE ASSY, ADJUSTMENT

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
501	1-452-202-00	MAGNET			
502	1-454-316-00	SOLENOID, PLUNGER			
503	1-520-453-00	(BLACK).....UNIT, LEVEL METER			
503	1-520-462-00	(SILVER)....METER UNIT, LED LEVEL			
504 ⚠	1-526-576-31	(E)....SELECTOR, POWER VOLTAGE			
505	1-535-139-00	(E)....BASE POST 19MM (10MM PITCH)			
506	1-548-536-71	COUNTER			
507 ⚠	1-534-817-XX	(AEP).....CORD, POWER, EULO PLUG			
507 ⚠	1-551-506-XX	(US,Canadian)...CORD, POWER			
507 ⚠	1-551-472-00	(E2).....CORD, POWER			
507 ⚠	1-555-734-00	(E1).....CORD, POWER			
507 ⚠	1-551-963-00	(UK;SILVER).....CORD, POWER			
507 ⚠	1-556-035-00	(UK;BLACK).....CORD, POWER			
508 ♦	1-605-860-00	(E).....PC BOARD, POWER			
509 ♦	1-607-999-00	PC BOARD, METER DRIVE			
510 ♦	1-608-169-00	PC BOARD, TAPE SELECT SWITCH			
511 ♦	1-610-479-00	PC BOARD, REC/PB			
512 ♦	1-610-480-00	PC BOARD, SWITCH			
513 ♦	1-610-481-00	PC BOARD, INTERRUPT			
514 ♦	1-610-483-00	PC BOARD, REC VOL			
515 ♦	1-610-484-00	PC BOARD, PIN JACK			
516 ♦	1-610-485-00	PC BOARD, CONTROL SWITCH			
517 ♦	A-2056-200-A	PC BOARD ASSY, AUDIO			
C101	1-123-380-00	ELECT	1MF	20%	50V
C102	1-162-110-00	CERAMIC	0.001MF	10%	50V
C103	1-123-382-00	ELECT	3.3MF	20%	50V
C104	1-123-380-00	ELECT	1MF	20%	50V
C105	1-162-037-00	CERAMIC	100PF	5%	50V
C106	1-123-356-00	ELECT	10MF	20%	16V
C107	1-162-107-00	CERAMIC	560PF	10%	50V
C108	1-130-624-00	FILM	0.022MF	5%	50V
C109	1-123-231-00	ELECT	3.3MF	20%	50V
C110	1-162-112-00	CERAMIC	0.0047MF	30%	25V
C111	1-162-103-00	CERAMIC	270PF	10%	50V
C112	1-131-409-00	ELECT(SOLID)	0.33MF	20%	16V
C113	1-130-632-00	FILM	0.1MF	5%	50V
C114	1-130-627-00	FILM	0.039MF	5%	50V
C115	1-130-620-00	FILM	0.01MF	5%	50V
C116	1-123-356-00	ELECT	10MF	20%	16V
C117	1-130-629-00	FILM	0.056MF	5%	50V
C118	1-130-629-00	FILM	0.056MF	5%	50V
C119	1-130-625-00	FILM	0.027MF	5%	50V
C120	1-108-573-00	MYLAR	0.0056MF	5%	50V
C121	1-123-369-00	ELECT	4.7MF	20%	50V

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- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS
- MMH : mH, UH : μH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C122	1-123-382-00	ELECT	3.3MF	20%	50V
C123	1-123-381-00	ELECT	2.2MF	20%	50V
C124	1-130-626-00	FILM	0.033MF	5%	50V
C125	1-123-330-00	ELECT	22MF	20%	16V
C126	1-130-622-00	FILM	0.015MF	5%	50V
C127	1-108-567-00	MYLAR	0.0033MF	5%	50V
C129	1-108-577-00	MYLAR	0.0082MF	5%	50V
C130	1-108-573-00	MYLAR	0.0056MF	5%	50V
C131	1-130-627-00	FILM	0.039MF	5%	50V
C132	1-108-577-00	MYLAR	0.0082MF	5%	50V
C135	1-123-382-00	ELECT	3.3MF	20%	50V
C136	1-107-167-00	MICA	75PF	5%	500V
C137	1-162-037-00	CERAMIC	100PF	5%	50V
C138	1-107-165-00	MICA	56PF	5%	500V
C139	1-162-037-00	CERAMIC	100PF	5%	50V
C140	1-102-973-00	CERAMIC	100PF	5%	50V
C141	1-102-973-00	CERAMIC	100PF	5%	50V
C201	1-123-380-00	ELECT	1MF	20%	50V
C202	1-162-110-00	CERAMIC	0.001MF	10%	50V
C203	1-123-382-00	ELECT	3.3MF	20%	50V
C204	1-123-380-00	ELECT	1MF	20%	50V
C205	1-162-037-00	CERAMIC	100PF	5%	50V
C206	1-123-356-00	ELECT	10MF	20%	16V
C207	1-162-107-00	CERAMIC	560PF	10%	50V
C208	1-130-624-00	FILM	0.022MF	5%	50V
C209	1-123-231-00	ELECT	3.3MF	20%	50V
C210	1-162-112-00	CERAMIC	0.0047MF	30%	25V
C211	1-162-103-00	CERAMIC	270PF	10%	50V
C212	1-131-409-00	ELECT(SOLID)	0.33MF	20%	16V
C213	1-130-632-00	FILM	0.1MF	5%	50V
C214	1-130-627-00	FILM	0.039MF	5%	50V
C215	1-130-620-00	FILM	0.01MF	5%	50V
C216	1-123-356-00	ELECT	10MF	20%	16V
C217	1-130-629-00	FILM	0.056MF	5%	50V
C218	1-130-629-00	FILM	0.056MF	5%	50V
C219	1-130-625-00	FILM	0.027MF	5%	50V
C220	1-108-573-00	MYLAR	0.0056MF	5%	50V
C221	1-123-369-00	ELECT	4.7MF	20%	50V
C222	1-123-382-00	ELECT	3.3MF	20%	50V
C223	1-123-381-00	ELECT	2.2MF	20%	50V
C224	1-130-626-00	FILM	0.033MF	5%	50V
C225	1-123-330-00	ELECT	22MF	20%	16V
C226	1-130-622-00	FILM	0.015MF	5%	50V
C227	1-108-567-00	MYLAR	0.0033MF	5%	50V
C229	1-108-577-00	MYLAR	0.0082MF	5%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C230	1-108-573-00	MYLAR	0.0056MF	5%	50V
C231	1-130-627-00	FILM	0.039MF	5%	50V
C232	1-108-577-00	MYLAR	0.0082MF	5%	50V
C235	1-123-330-00	ELECT	3.3MF	20%	50V
C236	1-107-167-00	MICA	75PF	5%	500V
C237	1-162-037-00	CERAMIC	100PF	5%	50V
C238	1-107-165-00	MICA	56PF	5%	500V
C239	1-162-037-00	CERAMIC	100PF	5%	50V
C240	1-162-037-00	CERAMIC	100PF	5%	50V
C241	1-102-973-00	CERAMIC	100PF	5%	50V
C301	1-123-336-00	ELECT	470MF	20%	25V
C302	1-123-335-00	ELECT	330MF	20%	25V
C303	1-123-309-00	ELECT	330MF	20%	10V
C304	1-123-307-00	ELECT	100MF	20%	10V
C305	1-123-356-00	ELECT	10MF	20%	16V
C306	1-123-324-00	ELECT	1000MF	20%	16V
C307	1-123-318-00	ELECT	33MF	20%	10V
C308	1-123-356-00	ELECT	10MF	20%	16V
C309	1-123-307-00	ELECT	100MF	20%	10V
C310	1-123-356-00	ELECT	10MF	20%	25V
C311	1-130-620-00	FILM	0.01MF	5%	50V
C312	1-123-379-00	ELECT	0.47MF	20%	50V
C313	1-123-369-00	ELECT	4.7MF	20%	50V
C314	1-130-293-00	FILM	0.0068MF	5%	100V
C315	1-130-293-00	FILM	0.0068MF	5%	100V
C316	1-130-287-00	FILM	0.0039MF	5%	100V
C317	1-129-708-00	FILM	0.0033MF	10%	630V
C318	1-123-382-00	ELECT	3.3MF	20%	50V
C319	1-123-356-00	ELECT	10MF	20%	16V
C320	1-123-356-00	ELECT	10MF	20%	16V
C321	1-123-356-00	ELECT	10MF	20%	16V
C322	1-123-308-00	ELECT	220MF	20%	10V
C323	1-123-308-00	ELECT	220MF	20%	10V
C324	1-161-330-00	CERAMIC	0.01MF	10%	50V
C325	1-162-113-00	CERAMIC	0.01MF	30%	16V
C326 ⚠	1-161-744-00	(AEP,UK,E)..CAP, CERAMIC	10000PF		400V
C326 ⚠	1-161-749-00	(US,Canadian)..CAP, CERAMIC	10000PF		125V
C327	1-123-369-00	ELECT	4.7MF	10%	50V
C328	1-161-494-00	CERAMIC	0.022MF	10%	50V
C401	1-123-369-00	ELECT	4.7MF	20%	25V
C402	1-123-369-00	ELECT	4.7MF	20%	25V
C403	1-123-356-00	ELECT	10MF	20%	16V
C404	1-123-356-00	ELECT	10MF	20%	16V

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- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:
- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS
- MMH : mH, UH : μH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C405	1-123-380-00	ELECT	1MF	20%	50V
C406	1-123-380-00	ELECT	1MF	20%	50V
C501	1-108-571-00	MYLAR	0.0047MF	5%	50V
C502	1-123-380-00	ELECT	1MF	20%	50V
C503	1-162-113-00	CERAMIC	0.01MF	30%	16V
C504	1-162-113-00	CERAMIC	0.01MF	30%	16V
C505	1-162-113-00	CERAMIC	0.01MF	30%	16V
C506	1-162-113-00	CERAMIC	0.01MF	30%	16V
C507	1-162-113-00	CERAMIC	0.01MF	30%	16V
C508	1-162-113-00	CERAMIC	0.01MF	30%	16V
C509	1-162-113-00	CERAMIC	0.01MF	30%	16V
C510	1-162-113-00	CERAMIC	0.01MF	30%	16V
C511	1-130-630-00	FILM	0.068MF	5%	50V
C512	1-123-380-00	ELECT	1MF	20%	50V
C513	1-123-305-00	ELECT	33MF	20%	10V
♦CNP301	1-560-064-00	PIN, CONNECTOR 6P			
♦CNP302	1-560-060-00	PIN, CONNECTOR 2P			
♦CNP303	1-560-603-00	PIN, CONNECTOR 4P			
♦CNP304	1-560-603-00	PIN, CONNECTOR 4P			
♦CNP501	1-560-062-00	PIN, CONNECTOR 4P			
♦CNP502	1-560-062-41	PIN, CONNECTOR 4P			
♦CNP503	1-560-063-00	PIN, CONNECTOR 5P			
♦CNP504	1-560-062-31	PIN, CONNECTOR 4P			
♦CNP505	1-560-061-00	PIN, CONNECTOR 3P			
♦CNP506	1-560-065-00	PIN, CONNECTOR 8P			
CT101	1-141-225-21	CAP, TUNING, TRIMMER			
CT201	1-141-225-21	CAP, TUNING, TRIMMER			
D101	8-719-901-33	DIODE 1SS133			
D201	8-719-901-33	DIODE 1SS133			
D301	8-719-200-02	DIODE 10E-2			
D302	8-719-200-02	DIODE 10E-2			
D303	8-719-200-02	DIODE 10E-2			
D304	8-719-200-02	DIODE 10E-2			
D305	8-719-200-02	DIODE 10E-2			
D306	8-719-200-02	DIODE 10E-2			
D307	8-719-200-02	DIODE 10E-2			
D308	8-719-901-33	DIODE 1SS133			
D309	8-719-901-33	DIODE 1SS133			
D310	8-719-901-33	DIODE 1SS133			
D311	8-719-901-33	DIODE 1SS133			
D312	8-719-901-33	DIODE 1SS133			
D313	8-719-901-33	DIODE 1SS133			
D314	8-719-910-92	DIODE HZ9A2L			
D315	8-719-901-33	DIODE 1SS133			
D501	8-719-901-33	DIODE 1SS133			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D505	8-719-934-05	DIODE SLR-34URC5
D506	8-719-934-34	DIODE AA3432S
D507	8-719-902-77	DIODE SLR-34PC5
D508	8-719-901-33	DIODE 1SS133
D509	8-719-901-33	DIODE 1SS133
D510	8-719-901-33	DIODE 1SS133
D511	8-719-901-33	DIODE 1SS133
D512	8-719-901-33	DIODE 1SS133
HE101	8-825-724-00	HEAD, ERASE EF-201-36
HRP101	8-825-507-50	HEAD, REC/PB (PP227-3602C)
IC101	8-759-300-76	IC CX-174A-2
IC201	8-759-300-76	IC CX-174A-2
IC301	8-759-101-04	IC CX10033
IC302	8-759-705-62	IC NJM4562D-D
IC303	8-759-600-02	IC M5218L
IC304	8-759-700-47	IC CX10035
IC501	8-759-201-44	IC TC9310N-015
J101	1-507-797-21	JACK, LARGE TYPE
J102	1-507-762-00	JACK, PIN 4P
J103	1-507-762-00	JACK, PIN 4P
J201	1-507-797-21	JACK, LARGE TYPE
J202	1-507-762-00	JACK, PIN 4P
J203	1-507-762-00	JACK, PIN 4P
J301	1-507-796-21	HACK
L101	1-408-262-00	MICRO INDUCTOR 27MMH
L102	1-408-252-00	MICRO INDUCTOR 3.9MMH
L201	1-408-262-00	MICRO INDUCTOR 27MMH
L202	1-408-252-00	MICRO INDUCTOR 3.9MMH
L301	1-407-177-XX	MICRO INDUCTOR 470UH
LPF101	1-231-388-31	FILTER, LOW PASS
LPF201	1-231-388-31	FILTER, LOW PASS
M501	1-541-201-00	MOTOR
PHI501	8-719-902-90	PHOTO INTERRUPTOR SPI201-20
Q101	8-729-194-57	TRANSISTOR 2SC945-P
Q102	8-729-811-24	TRANSISTOR 2SD1012
Q103	8-729-811-24	TRANSISTOR 2SD1012
Q104	8-729-811-24	TRANSISTOR 2SD1012
Q105	8-729-194-57	TRANSISTOR 2SC945-P
Q106	8-729-194-57	TRANSISTOR 2SC945-P
Q107	8-729-194-57	TRANSISTOR 2SC945-P
Q108	8-729-194-57	TRANSISTOR 2SC945-P
Q201	8-729-194-57	TRANSISTOR 2SC945-P

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CAPACITORS:
- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

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- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
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COILS
- MMH : mH, UH : μH

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q202	8-729-811-24	TRANSISTOR 2SD1012
Q203	8-729-811-24	TRANSISTOR 2SD1012
Q204	8-729-811-24	TRANSISTOR 2SD1012
Q205	8-729-194-57	TRANSISTOR 2SC945-P
Q206	8-729-194-57	TRANSISTOR 2SC945-P
Q207	8-729-194-57	TRANSISTOR 2SC945-P
Q208	8-729-194-57	TRANSISTOR 2SC945-P
Q301	8-729-180-93	TRANSISTOR 2SD809
Q302	8-729-173-13	TRANSISTOR 2SB731
Q303	8-729-180-93	TRANSISTOR 2SD809
Q304	8-729-194-57	TRANSISTOR 2SC945-P
Q305	8-729-194-57	TRANSISTOR 2SC945-P
Q306	8-729-117-54	TRANSISTOR 2SA1175
Q307	8-729-194-57	TRANSISTOR 2SC945-P
Q308	8-729-194-57	TRANSISTOR 2SC945-P
Q309	8-729-194-57	TRANSISTOR 2SC945-P
Q310	8-729-194-57	TRANSISTOR 2SC945-P
Q311	8-729-117-54	TRANSISTOR 2SA1175
Q312	8-729-194-57	TRANSISTOR 2SC945-P
Q313	8-729-117-54	TRANSISTOR 2SA1175
Q314	8-729-117-54	TRANSISTOR 2SA1175
Q315	8-729-194-57	TRANSISTOR 2SC945-P
Q501	8-729-117-54	TRANSISTOR 2SA1175
Q502	8-729-117-54	TRANSISTOR 2SA1175
Q503	8-729-194-57	TRANSISTOR 2SC945-P
Q504	8-729-194-57	TRANSISTOR 2SC945-P
Q505	8-729-194-57	TRANSISTOR 2SC945-P
Q506	8-729-117-54	TRANSISTOR 2SA1175
R101	1-246-509-00	CARBON 33K 5% 1/4W
R102	1-247-843-00	CARBON 3.3K 5% 1/6W
R103	1-247-855-00	CARBON 10K 5% 1/6W
R104	1-247-819-00	CARBON 330 5% 1/6W
R105	1-247-866-00	CARBON 30K 5% 1/6W
R106	1-246-521-00	CARBON 100K 5% 1/4W
R109	1-246-485-00	CARBON 3.3K 5% 1/4W
R110	1-246-493-00	CARBON 6.8K 5% 1/4W
R111	1-247-831-00	CARBON 1K 5% 1/6W
R112	1-246-529-00	CARBON 220K 5% 1/4W
R113	1-246-449-00	CARBON 100 5% 1/4W
R114	1-246-524-00	CARBON 130K 5% 1/4W
R115	1-246-491-00	CARBON 5.6K 5% 1/4W
R116	1-246-499-00	CARBON 12K 5% 1/4W
R117	1-247-887-00	CARBON 220K 5% 1/6W
R118	1-247-861-00	CARBON 18K 5% 1/6W
R119	1-247-831-00	CARBON 1K 5% 1/6W
R121	1-247-888-00	CARBON 240K 5% 1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R122	1-247-888-00	CARBON 240K 5% 1/6W
R123	1-247-859-00	CARBON 15K 5% 1/6W
R124	1-247-850-00	CARBON 6.2K 5% 1/6W
R125	1-247-807-00	CARBON 100 5% 1/6W
R126	1-247-867-00	CARBON 33K 5% 1/6W
R127	1-247-813-00	CARBON 180 5% 1/6W
R128	1-247-875-00	CARBON 68K 5% 1/6W
R129	1-247-821-00	CARBON 390 5% 1/6W
R130	1-247-898-00	CARBON 620K 5% 1/6W
R131	1-247-835-00	CARBON 1.5K 5% 1/6W
R132	1-246-481-00	CARBON 2.2K 5% 1/4W
R133	1-246-513-00	CARBON 47K 5% 1/4W
R134	1-246-497-00	CARBON 10K 5% 1/4W
R135	1-247-831-00	CARBON 1K 5% 1/6W
R136	1-246-505-00	CARBON 22K 5% 1/4W
R137	1-247-847-00	CARBON 4.7K 5% 1/6W
R138	1-247-847-00	CARBON 4.7K 5% 1/6W
R139	1-246-473-00	CARBON 1K 5% 1/4W
R140	1-246-521-00	CARBON 100K 5% 1/4W
R141	1-247-881-00	CARBON 120K 5% 1/6W
R142	1-247-885-00	CARBON 180K 5% 1/6W
R143	1-247-841-00	CARBON 2.7K 5% 1/6W
R144	1-247-805-00	CARBON 82 5% 1/6W
R145	1-247-863-00	CARBON 22K 5% 1/6W
R147	1-247-851-00	CARBON 6.8K 5% 1/6W
R148	1-247-847-00	CARBON 4.7K 5% 1/6W
R149	1-247-831-00	CARBON 1K 5% 1/6W
R150	1-247-839-00	CARBON 2.2K 5% 1/6W
R151	1-247-831-00	CARBON 1K 5% 1/6W
R152	1-247-841-00	CARBON 2.7K 5% 1/6W
R155	1-247-863-00	CARBON 22K 5% 1/6W
R156	1-247-863-00	CARBON 22K 5% 1/6W
R157	1-247-863-00	CARBON 22K 5% 1/6W
R158	1-247-863-00	CARBON 22K 5% 1/6W
R159	1-246-481-00	CARBON 2.2K 5% 1/4W
R160	1-247-855-00	CARBON 10K 5% 1/6W
R161	1-247-857-00	CARBON 12K 5% 1/6W
R162	1-247-853-00	CARBON 8.2K 5% 1/6W
R163	1-247-815-00	CARBON 220 5% 1/6W
R164	1-246-499-00	CARBON 12K 5% 1/4W
R165	1-247-855-00	CARBON 10K 5% 1/6W
R166	1-247-807-00	CARBON 100 5% 1/6W
R168	1-247-813-00	CARBON 180 5% 1/6W
R201	1-246-509-00	CARBON 33K 5% 1/4W
R202	1-247-843-00	CARBON 3.3K 5% 1/6W

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- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS
- MMH : mH, UH : μH

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R203	1-247-855-00	CARBON	10K	5%	1/6W
R204	1-247-819-00	CARBON	330	5%	1/6W
R205	1-247-866-00	CARBON	30K	5%	1/6W
R206	1-246-521-00	CARBON	100K	5%	1/4W
R209	1-246-485-00	CARBON	3.3K	5%	1/4W
R210	1-246-493-00	CARBON	6.8K	5%	1/4W
R211	1-247-831-00	CARBON	1K	5%	1/6W
R212	1-246-529-00	CARBON	220K	5%	1/4W
R213	1-246-449-00	CARBON	100	5%	1/4W
R214	1-246-524-00	CARBON	130K	5%	1/4W
R215	1-246-491-00	CARBON	5.6K	5%	1/4W
R216	1-246-499-00	CARBON	12K	5%	1/4W
R217	1-247-887-00	CARBON	220K	5%	1/6W
R218	1-247-861-00	CARBON	18K	5%	1/6W
R219	1-247-831-00	CARBON	1K	5%	1/6W
R221	1-247-888-00	CARBON	240K	5%	1/6W
R222	1-247-888-00	CARBON	240K	5%	1/6W
R223	1-247-859-00	CARBON	15K	5%	1/6W
R224	1-247-850-00	CARBON	6.2K	5%	1/6W
R225	1-247-807-00	CARBON	100	5%	1/6W
R226	1-247-867-00	CARBON	33K	5%	1/6W
R227	1-247-813-00	CARBON	180	5%	1/6W
R228	1-247-875-00	CARBON	68K	5%	1/6W
R229	1-247-821-00	CARBON	390	5%	1/6W
R230	1-247-898-00	CARBON	620K	5%	1/6W
R231	1-247-835-00	CARBON	1.5K	5%	1/6W
R232	1-246-481-00	CARBON	2.2K	5%	1/4W
R233	1-246-513-00	CARBON	47K	5%	1/4W
R234	1-246-497-00	CARBON	10K	5%	1/4W
R235	1-247-831-00	CARBON	1K	5%	1/6W
R236	1-246-505-00	CARBON	22K	5%	1/4W
R237	1-247-847-00	CARBON	4.7K	5%	1/6W
R238	1-247-847-00	CARBON	4.7K	5%	1/6W
R239	1-246-473-00	CARBON	1K	5%	1/4W
R240	1-246-521-00	CARBON	100K	5%	1/4W
R241	1-247-881-00	CARBON	120K	5%	1/6W
R242	1-247-885-00	CARBON	180K	5%	1/6W
R243	1-247-841-00	CARBON	2.7K	5%	1/6W
R244	1-247-805-00	CARBON	82	5%	1/6W
R245	1-247-863-00	CARBON	22K	5%	1/6W
R247	1-247-851-00	CARBON	6.8K	5%	1/6W
R248	1-247-847-00	CARBON	4.7K	5%	1/6W
R249	1-247-831-00	CARBON	1K	5%	1/6W
R250	1-247-839-00	CARBON	2.2K	5%	1/6W
R251	1-247-831-00	CARBON	1K	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R252	1-247-841-00	CARBON	2.7K	5%	1/6W
R255	1-247-863-00	CARBON	22K	5%	1/6W
R256	1-247-863-00	CARBON	22K	5%	1/6W
R257	1-247-863-00	CARBON	22K	5%	1/6W
R258	1-247-863-00	CARBON	22K	5%	1/6W
R259	1-246-481-00	CARBON	2.2K	5%	1/4W
R260	1-247-855-00	CARBON	10K	5%	1/6W
R261	1-247-857-00	CARBON	12K	5%	1/6W
R262	1-247-853-00	CARBON	8.2K	5%	1/6W
R263	1-247-815-00	CARBON	220	5%	1/6W
R264	1-246-499-00	CARBON	12K	5%	1/4W
R265	1-247-855-00	CARBON	10K	5%	1/6W
R266	1-247-807-00	CARBON	100	5%	1/6W
R268	1-247-813-00	CARBON	180	5%	1/6W
R301	1-246-499-00	CARBON	12K	5%	1/4W
R302	1-246-482-00	CARBON	2.4K	5%	1/4W
R303	1-246-481-00	CARBON	2.2K	5%	1/4W
R304	1-246-500-00	CARBON	13K	5%	1/4W
R305	1-247-847-00	CARBON	4.7K	5%	1/6W
R306	1-247-826-00	CARBON	620	5%	1/6W
R307	1-247-842-00	CARBON	3K	5%	1/6W
R308	1-247-829-00	CARBON	820	5%	1/6W
R309	1-247-831-00	CARBON	1K	5%	1/6W
R310	1-247-851-00	CARBON	6.8K	5%	1/6W
R311	1-247-843-00	CARBON	3.3K	5%	1/6W
R312	1-247-849-00	CARBON	5.6K	5%	1/6W
R313	1-247-816-00	CARBON	240	5%	1/6W
R314	1-247-843-00	CARBON	3.3K	5%	1/6W
R315	1-247-855-00	CARBON	10K	5%	1/6W
R316	1-247-871-00	CARBON	47K	5%	1/6W
R317	1-247-871-00	CARBON	47K	5%	1/6W
R318	1-247-855-00	CARBON	10K	5%	1/6W
R319	1-247-857-00	CARBON	12K	5%	1/6W
R320	1-247-857-00	CARBON	12K	5%	1/6W
R321 ⚠	1-217-529-00	FUSIBLE	33	5%	1/4W
R322	1-247-855-00	CARBON	10K	5%	1/6W
R323	1-247-847-00	CARBON	4.7K	5%	1/6W
R324	1-247-855-00	CARBON	10K	5%	1/6W
R325	1-247-879-00	CARBON	100K	5%	1/6W
R326	1-247-863-00	CARBON	22K	5%	1/6W
R327	1-247-855-00	CARBON	10K	5%	1/6W
R328	1-247-879-00	CARBON	100K	5%	1/6W
R329	1-247-831-00	CARBON	1K	5%	1/6W
R330	1-247-847-00	CARBON	4.7K	5%	1/6W
R331	1-247-871-00	CARBON	47K	5%	1/6W

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CAPACITORS:
- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS
- MMH : mH, UH : μH

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R332	1-247-823-00	CARBON	470	5%	1/6W
R333	1-247-823-00	CARBON	470	5%	1/6W
R334	1-247-887-00	CARBON	220K	5%	1/6W
R335	1-247-855-00	CARBON	10K	5%	1/6W
R336	1-247-883-00	CARBON	150K	5%	1/6W
R337	1-246-489-00	CARBON	4.7K	5%	1/4W
R401	1-246-465-00	CARBON	470	5%	1/4W
R402	1-246-465-00	CARBON	470	5%	1/4W
R403	1-246-465-00	CARBON	470	5%	1/4W
R404	1-246-465-00	CARBON	470	5%	1/4W
R405	1-246-465-00	CARBON	470	5%	1/4W
R406	1-246-489-00	CARBON	4.7K	5%	1/4W
R407	1-246-489-00	CARBON	4.7K	5%	1/4W
R408	1-246-509-00	CARBON	33K	5%	1/4W
R409	1-246-509-00	CARBON	33K	5%	1/4W
R501	1-247-863-00	CARBON	22K	5%	1/6W
R502	1-247-879-00	CARBON	100K	5%	1/6W
R503	1-247-855-00	CARBON	10K	5%	1/6W
R504	1-247-819-00	CARBON	330	5%	1/6W
R505	1-247-872-00	CARBON	51K	5%	1/6W
R506	1-247-831-00	CARBON	1K	5%	1/6W
R507	1-247-831-00	CARBON	1K	5%	1/6W
R508	1-247-831-00	CARBON	1K	5%	1/6W
R509	1-247-831-00	CARBON	1K	5%	1/6W
R510	1-247-831-00	CARBON	1K	5%	1/6W
R511	1-247-831-00	CARBON	1K	5%	1/6W
R512	1-247-831-00	CARBON	1K	5%	1/6W
R513	1-247-831-00	CARBON	1K	5%	1/6W
R514	1-247-831-00	CARBON	1K	5%	1/6W
R515	1-247-887-00	CARBON	220K	5%	1/6W
R516	1-247-903-00	CARBON	1M	5%	1/6W
R517	1-247-863-00	CARBON	22K	5%	1/6W
R518	1-247-863-00	CARBON	22K	5%	1/6W
R519	1-247-879-00	CARBON	100K	5%	1/6W
R520	1-247-863-00	CARBON	22K	5%	1/6W
R523	1-247-811-00	CARBON	150	5%	1/6W
R524	1-247-825-00	CARBON	560	5%	1/6W
R525	1-247-819-00	CARBON	330	5%	1/6W
R526	1-247-863-00	CARBON	22K	5%	1/6W
R527	1-247-839-00	CARBON	2.2K	5%	1/6W
R528	1-247-839-00	CARBON	2.2K	5%	1/6W
R530	1-247-855-00	CARBON	10K	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV101	1-226-991-00	RES, VAR, SLIDE 20K/20K
RV102	1-226-236-00	RES, ADJ, CARBON 10K
RV103	1-226-853-41	RES, ADJ, CARBON 47K
RV201	1-226-991-00	RES, VAR, SLIDE 20K/20K
RV202	1-226-236-00	RES, ADJ, CARBON 10K
RV203	1-226-853-41	RES, ADJ, CARBON 47K
RV401	1-226-236-00	RES, ADJ, CARBON 10K
RV402	1-226-236-00	RES, ADJ, CARBON 10K
RY301	1-515-473-12	RELAY
S301 ⚠	1-553-318-00	(AEP,UK,E).....SWITCH, PUSH (AC POWER)
S301 ⚠	1-553-319-00	(US,Canadian)...SWITCH, PUSH (AC POWER)
S302	1-554-207-12	SWITCH, PUSH (2 KEY)
S303	1-554-207-12	SWITCH, PUSH (2 KEY)
S501	1-554-210-00	SWITCH, PUSH
S502	1-554-210-00	SWITCH, PUSH
S503	1-554-210-00	SWITCH, PUSH
S504	1-554-210-00	SWITCH, PUSH
S505	1-554-210-00	SWITCH, PUSH
S506	1-554-210-00	SWITCH, PUSH
S507	1-554-210-00	SWITCH, PUSH
S551	1-554-205-00	SWITCH, PUSH
S552	1-554-205-00	SWITCH, PUSH
S553	1-554-205-00	SWITCH, PUSH
S554	1-554-205-00	SWITCH, PUSH
T301 ⚠	1-447-356-00	(US,Canadian)...TRANSFORMER, POWER
T301 ⚠	1-447-357-00	(E).....TRANSFORMER, POWER
T301 ⚠	1-447-358-00	(AEP,UK).....TRANSFORMER, POWER
T302	1-433-267-00	TRANSFORMER, OSCILLATOR

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Sony Corporation
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Technical Support Dept.

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